

# American Artisan and Hardware Record

Sheet Metal—Roofing—Warm Air Furnaces—Stoves

Vol. 91, No. 19

CHICAGO, MAY 8, 1926

\$2.00 Per Year

## HORSE HEAD ZINC at the Polo Grounds



The home of the New York Giants, where more than two thousand feet of Horse Head Zinc leaders, elbows and drain boxes are in use.

Leaders and Gutters of Horse Head Zinc are made in all standard shapes and sizes and distributed by the following fabricators:

DAVID LUPTON'S SONS CO. . . . Philadelphia, Pa.  
The J. M. & L. A. OSBORN CO. . . . Cleveland, Ohio · Buffalo, New York  
KLAUER MANUFACTURING CO. . . . Dubuque, Ia.  
HOLBROOK, MERRILL & STETSON . . . San Francisco  
Oakland and Los Angeles, Cal.  
SHEET METAL MANUFACTURING CO., INC.  
Brooklyn, N. Y.

**The New Jersey Zinc Company**  
160 Front Street, New York City



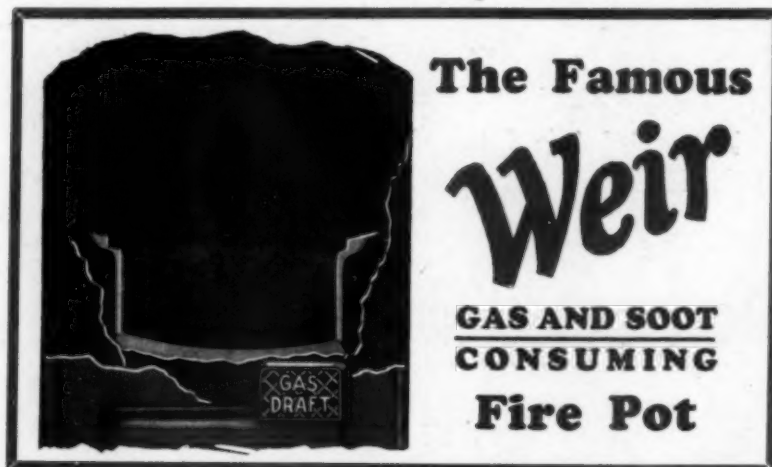
"More Pliable—Greater Strength and Durability" read Mr. Coleman's letter. Horse Head Zinc is easy to work—and installations are permanent



**THE NEW JERSEY ZINC COMPANY**  
160 FRONT STREET, NEW YORK CITY  
Please send me a sample of Horse Head Zinc so that I can test its pliability and strength.  
NAME \_\_\_\_\_ ADDRESS \_\_\_\_\_

5-A

**S**ell the one furnace that produces Hard Coal and Coke results from ordinary Soft Coal.



**This Exclusive Patented Weir construction provides Highest Heating Efficiency and Greatest Fuel Economy**

**R**EMEMBER that when you talk about this feature of the Weir to your customers you are not merely pointing out a "selling feature" or "talking point" but rather emphasizing an important part of Weir construction.

The Weir Fire Pot is distinctly and exclusively a Weir idea and it was developed for the purpose of burning soft coal successfully.

Soft coal burning makes the Weir an economical heating plant—Weir construction makes it a highly efficient heating plant.

Secure additional warm air heating business by emphasizing these unequalled merits of the Weir.

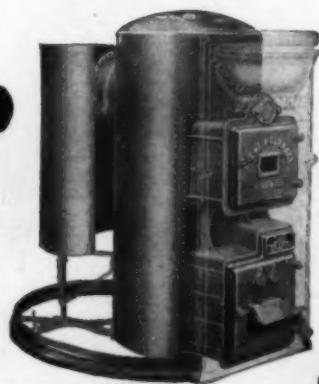
Write for your  
copy of the



WEIR Book  
of Facts

**The MEYER FURNACE Co.**  
Peoria, Illinois

**Weir**



**Steel  
Furnace**



Good pipe and gutter work is a reliable indication  
of a well-built home

## Good Elbows for Good Homes

USUALLY home-buyers know little about the relative merits of the elbows used on a house. When they are shown, however, that long-wearing, rust-resisting elbows are essential to the economy and good appearance of their house, they are inclined to take good pipe and gutter work as an indication of the well-built home.

For this reason, Lupton elbows are popular with contractors. The best non-corroding metals, perfect uniformity of fit and shape make these elbows a source of permanent satisfaction both to the contractor who erects them and the owner who enjoys their protection.

*Specify Lupton Elbows to Your Jobber*

**DAVID LUPTON'S SONS CO.**

Allegheny Ave. and Tulip St.  
PHILADELPHIA



Lupton Perfect Fitting Elbow—round  
corrugated No. 3—75 degree

# LUPTON

ELBOWS THAT FIT



**WIECHERT**

CENTRALIA

ILLINOIS

## heat store buildings, too!

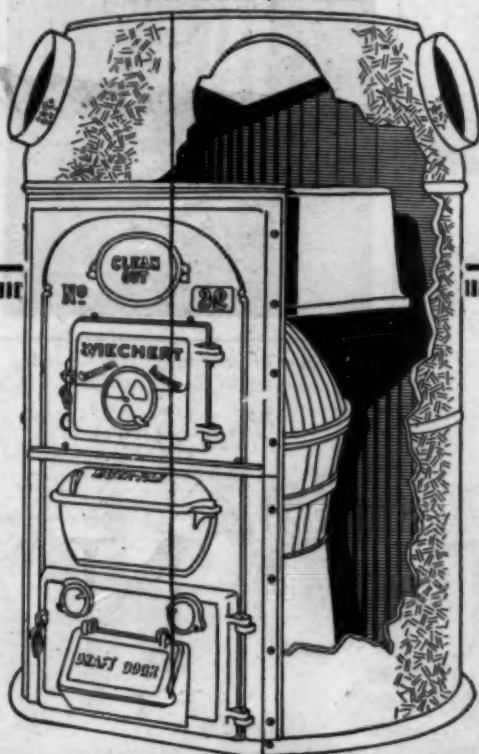
Why limit your furnace sales to house owners?

How many store buildings, especially some of the old ones, were never comfortably heated last winter? You can name one or two right, now, can't you? They need a Wiechert No. 20 Series Pipe Furnace or a Heavy Duty Furnace for next winter. And this summer is the best time to install it. Go over and see the owners of those buildings today? Explain to them just how low the cost will be for equipping and heating those buildings with Wiecherts.

Write today for more information and latest discounts.

**St. Clair Foundry Corp.**  
Centralia, Ill.

No. 20 Series Pipe Furnace



## Built to Give Lifetime Satisfaction



WE show here how the "WESTERN'S" sheets of boiler plate are held together. Heavy rivets driven in cold, under 10 ton pressure and seams tightly calked in addition, assure a heating plant which you can be satisfied will never leak gas, smoke or dust.

Yet in Spite of Its Superior  
Construction  
The "Western" Is the Most Reasonably  
Priced Steel Furnace on the  
Market Today!

Complete Stocks carried by these distributors:

SOUTHERN ILLINOIS  
American Foundry and Furnace Co., Bloomington, Ill.

KANSAS AND MISSOURI  
Kansas City Furnace Co., Kansas City, Mo.

WEST CENTRAL STATES  
Standard Furnace and Supply Co., Omaha, Neb.

NEW ENGLAND STATES  
Dedatur & Hopkins Co., 93 Berkeley St., Boston, Mass.

CALIFORNIA AND NEVADA  
Pacific Coast Sheet Metal & Furnace Co.  
3200 Geary St., San Francisco, Cal.

Write Today for Complete Information!

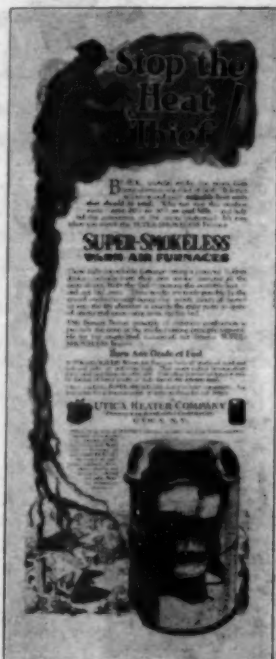
**THE WESTERN STEEL PRODUCTS CO.**  
Duluth, Minn. Minneapolis, Minn.



**THE  
WESTERN**



## National Advertising Creates Demand For The SUPER-SMOKELESS Furnace!



(Reproduction of 1/2 Page Advertisement in the Saturday Evening Post)

NATIONAL advertising creates a demand for the wonderful SUPER-SMOKELESS Furnace, brings new customers and sells more furnaces. And satisfied customers bring future business. The dealer who takes on this line now is sure to reap not only immediate business but also large future rewards.

The SUPER-SMOKELESS Furnace offers to Home Owners many superior advantages unequalled in any other furnace. The dealer who sells them is in a distinct class—actually above competition. He can establish a bigger and better business and get good prices for his work.

Under our Utica Merchandising Plan, our representatives co-operate with our dealers and help them sell the furnaces they buy. This plan is a proved success and brings new customers—sells more furnaces—and increases your profits proportionately. It will pay you to write—without obligation to you—for full particulars about our Exclusive Dealer Proposition and Utica Merchandising Plan.

### UTICA HEATER COMPANY

*"Pioneers in Smokeless Combustion"*

UTICA, N. Y.—CHICAGO, ILL.

## A complete Furnace and Supply Service!

THE furnaces shown here, the Nesbit, the Weir and the Stanco, fit your every requirement for quality warm air heating and at the right price.



Nesbit All-Cast Furnace

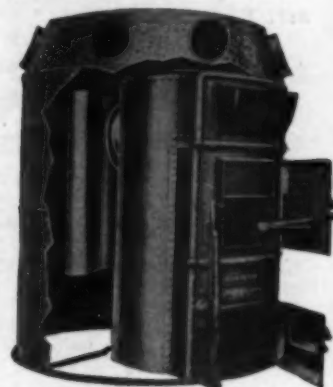
LET us send you full details and catalogs covering this line. Let us show you the completeness of our furnace line and demonstrate our reliable service.



Weir All-Steel Furnace

WE carry large stocks of every needed furnace supply item from Registers to Furnace Cement. All leading makes and dependable quality.

*Let us fill your next order—  
we will give you real service.*



Stanco Steel Furnace

**STANDARD FURNACE & SUPPLY COMPANY**  
Omaha, Nebr.      Western Service for Western Dealers      Sioux City, Iowa



## Choose a Good Partner

**Y**OU have at least one business partner—the line of furnaces you install.

Remember, a good partner will help make you—a bad one will break you.

Make the Moncrief line your partner. It will pull with you and pull for you, and match your every good effort with enduring good quality.

*Write for details of our proposition.*

*The*  
**Henry Furnace & Foundry Co.**  
3471 E. 49th Street CLEVELAND, OHIO

*Manufacturers of single and double wall pipe  
and fittings, galvanized pipe and fittings, etc.*

#### *Eastern Sales Offices:*

F. H. HANLON  
Batavia, New York

W. S. McCREA  
105 Federal St., N. S., Pittsburgh, Pa.

#### *Western and Southern Distributors:*

JOHNSON FURNACE CO.  
Kansas City, Missouri

MONCRIEF FURNACE CO.  
Atlanta, Ga.

MONCRIEF FURNACE & MFG. CO.  
Dallas, Texas

# MONCRIEF FURNACES

# WISE FURNACES



**T**HE construction of the Wise furnace is something more than castings fitted together. Such important details as design and proportion of the radiator and fire pot on Wise furnaces show that in these points of construction, as well as all other features, great care has been taken to have them scientifically correct.

Proper, satisfactory heating can only be had from furnaces that can produce correct combustion. And not only this—a furnace must also have a great area of heating surface and large even flow of air circulation.

Wise furnaces are designed to give superior heating service and they are constructed of the best grade iron.

*OUR catalog gives full details  
and our agency proposition  
will interest you. Write or  
complete information today.*

**The WISE FURNACE CO.**  
AKRON, OHIO

# BOOMER

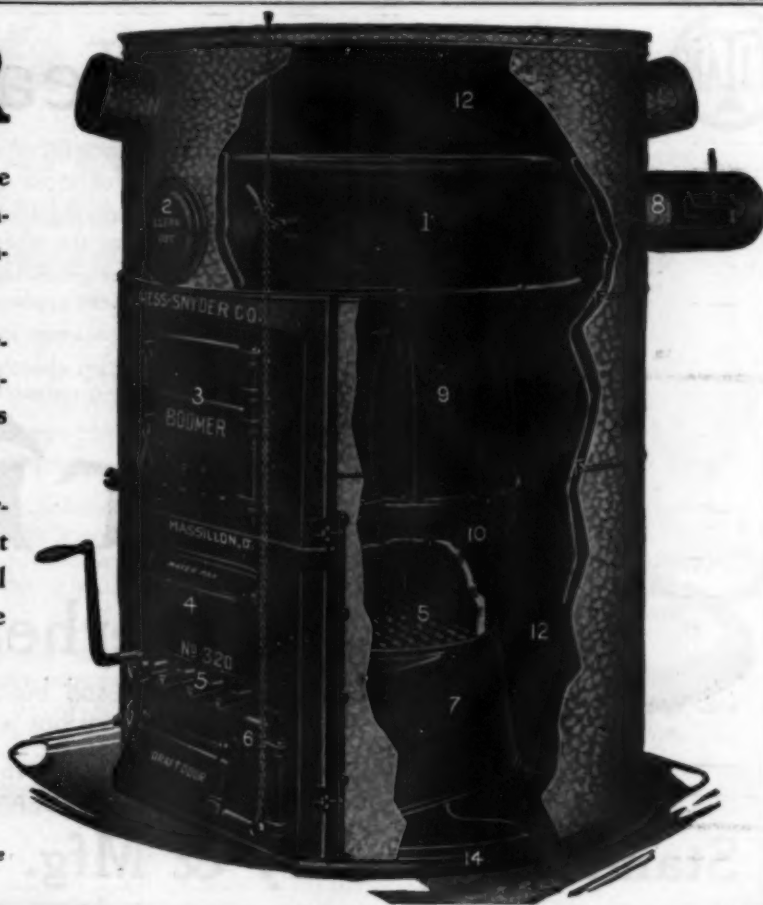
**T**HIS is our latest addition to the Boomer line. We heartily recommend it for your favorable consideration.

The severe tests we have given this furnace have proven its durability. The unsolicited reports we received from users last winter have been most flattering.

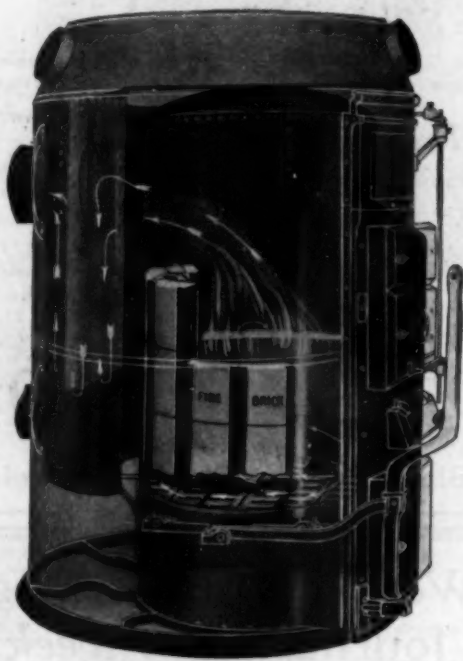
For durability, economy, easy to operate, easy to set up and the low price at which we offer this furnace, you will make no mistake in arranging for the agency.

**THE HESS-SNYDER CO.**  
MASSILLON, OHIO

Makers of BOOMER FURNACES for Forty-Three Years



## The NEW PEERLESS



*Exclusive features,  
Automatic damper control,  
Thermos casing and top-down  
draft combustion.*

**N**OW ranks head and shoulders above all in its leadership for supremacy in genuine improvements.

Quality, a term often used loosely, has never been a myth. Neither have guarantees or generalities been used instead of facts.

The time has never come when a PEERLESS must be sold on a guarantee instead of merit.

The new and improved PEERLESS Furnace illustrated herewith is a genuine improvement, the result of experience and initiative, wherein sound principles of heating engineering have been combined with the practical needs and comfort of the ultimate user.

To say that we are proud of this furnace would mean little if it did not meet the endorsement of not only furnace dealers and the public, but the reflection of credit it has cast on the furnace industry as a whole.

Some of the new features are listed herewith. We're glad to send full particulars to those interested.

**THE PEERLESS FOUNDRY COMPANY**

1853 Ludlow Avenue

Indianapolis, Indiana

Warehouse, Pittsburgh, Pa., Youngstown, Ohio, Cincinnati, Ohio





# They Are Years Ahead



You old furnace men—just note these facts and you'll agree that Titan Furnaces are years ahead of the average.

Each individual roller grate bar is removable without disturbing the others—a patented feature.

The roller grates have a shaking action as well as dumping—patent applied for.

Fire pot has cup joint—gas tight.

Combustion chamber has "wave" top to increase heat surface—a patented feature.

## TITAN

### Superheater Furnaces

are designed and built for the quality trade. They are not cheap furnaces but are priced right for profitable selling.

*You should know ALL the superior points about Titan Furnaces. Write for catalog and photographs.*

**Standard Foundry & Mfg. Co.,** 1700 Pleasant St.  
De Kalb, Illinois



### Increased Profits and Less Competition



### AWAIT YOU IN A QUEEN FURNACE AGENCY

#### *You Can Sell Every Prospect*

as there is a size and style for every job priced to assure a sale. Exclusive features and our guarantee of quality and long service makes for

#### *A Proven Leader*

*Our Queen furnace has—*

More rapid circulation of air.

Better combustion of smoke and gases.

Convenient and efficient air moistener.

Smoke pipe which can be taken off at any angle, flat or triangular grates, interchangeable and is perfectly suited for burning any fuel.

We sell only to the trade. Catalog, agency proposition and merchandising helps on request.

## FLORAL CITY HEATER CO.

Monroe, Michigan

1654 Monadnock Bldg.

Chicago, Illinois

*The latest news about the Warm Air Heating Industry is to be found in this Journal every week.*

*This is the only trade Journal covering this field published every week.*



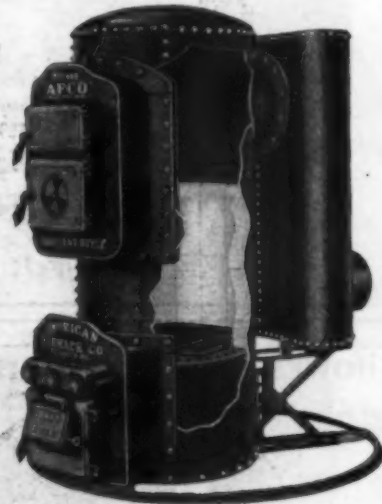
**Fact No. 1** Watch for No. 2  
in an early issue

## An "AFCO" Furnace Is "Built Like a Power Boiler"

Heavy Boiler Plate Steel is used in the body construction. Joints are sealed under tremendous pressure with steel steeple head rivets. They have a big margin of safety and are capable of withstanding many times the heat and wear that they will receive in ordinary use.

This is one of the many features that has earned an enviable reputation for American Furnaces, and why many have given 20 and more years of continuous service without repairs—in many instances outlasting the homes in which they were originally installed. That's heating satisfaction.

Sell AFCO Furnaces and you sell heating satisfaction. You make a real friend of every buyer. It means progress, both for you and the Warm Air Heating Industry.

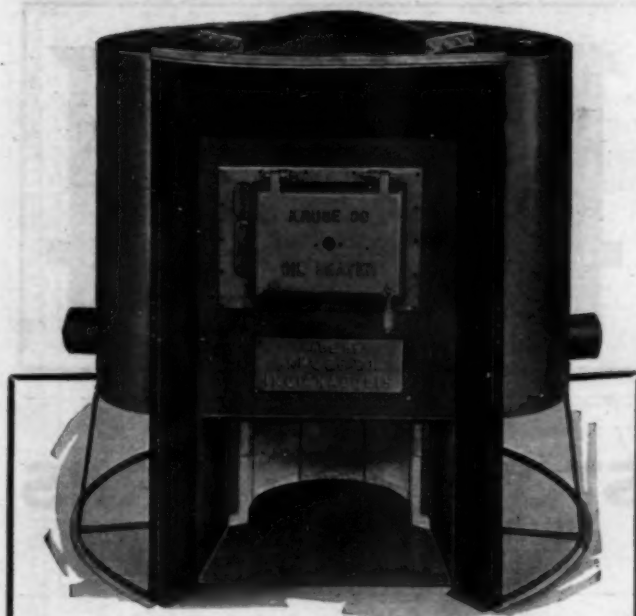


Write for our complete catalogue describing this new "AFCO" Crescent Style, Boiler Plate Furnace. There are many new features of construction.

# American Furnace Co.

2719-31 Morgan St.

St. Louis, Mo.



## KRUSE OIL FURNACE

OIL is the modern fuel and the Kruse Oil Furnace is scientifically designed and constructed to use oil—efficiently and economically.

Its special welded steel construction, tubular design, and immense heating surface insure maximum results.

You should find out now how the Kruse Oil Furnace is getting real business for dealers.

Write today for details on this and on regular welded steel coal burning furnaces.

## KRUSE COMPANY

Welded Steel Furnaces

INDIANAPOLIS

INDIANA



## Use this strong, well-made, economical pipe for faster and more profitable work

Chicago Pipe and Fittings are made of heavy first quality material. You can get it Single or Double and in all standard sizes and practical shapes.

It is easy to put together—it saves time and trouble on the job and it is very economical.

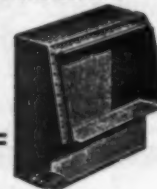
Write today for our latest catalog No. 20 and ask for latest price list.

We also carry the most complete stocks of all kinds of supplies for the warm air furnace installer.

Send your orders to this reliable prompt delivery house for real service and prices that give you good profits.

**CHICAGO FURNACE SUPPLY CO.**  
1276-78-80-82 Clybourn Ave. CHICAGO

Reliable  
Service



Prompt  
Shipments

Mention AMERICAN ARTISAN in your reply—Thank you!



*The Improved Air Duct Increases the Heating Capacity about 30 per cent in our*

## WASHINGTON HOME FURNACE

Placed above floor, hence saves the cost of digging cellar. Produces circulating moist heat for 5 to 7 rooms. Is the most beautiful, economical and efficient Furnace on the market. It can be installed in a living room. No basement required. Our Gigantic Advertising Campaign during the Fall of 1926, will reach over *Six Million Homes*. Through National Magazines, Farm Papers and Metropolitan Newspapers, thousands in your territory will be interested. Your Section may be open. Write now for the complete details.

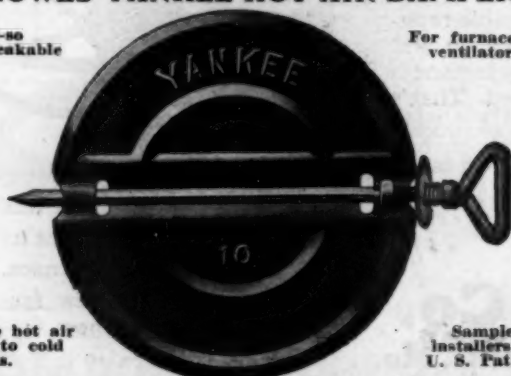
**GRAY & DUDLEY COMPANY**  
NASHVILLE, TENN.

*"We melt over 100,000 Pounds of Southern Pig Iron Daily"*

### HOWES YANKEE HOT AIR DAMPERS

Steel—no  
unbreakable

For furnace and  
ventilator pipe



Make hot air  
flow to cold  
rooms.

Samples for  
installers Reg.  
U. S. Pat. Off.

THE S. M. HOWES CO., 503 MEDFORD ST., CHARLESTOWN, MASS.

Write

For Our  
Illustrated  
Book of  
Order Blanks

You'll find this book handy. It explains  
how and simplifies ordering Stove, Fur-  
nace and Boiler repairs from the—

*Largest and Most Complete Stock*

**NORTHWESTERN**  
STOVE REPAIR CO., CHICAGO



*It will pay you  
To Buy Your  
Stove Trimmings  
From Us*

LARGE selection—  
beautifully finished.  
Made from our own  
steel.

Let us quote you

THE AMERICAN TUBE & STAMPING  
COMPANY  
THE MILL COMPLETE

ATASCO

**"American Seal"**

FURNACE CEMENT

Roof Cement — Stove Putty  
Plumbers Putty

PAINTS and SPECIALTIES

WILLIAM CONNORS PAINT MFG. CO.  
TROY

Established 1852

NEW YORK

JAMES L. PERKINS  
Western Distributor  
140 S. Dearborn St., Chicago, Ill.



## BOLTS

WE MANUFACTURE A COMPLETE LINE  
OF BOLT PRODUCTS, INCLUDING STOVE  
BOLTS, CARRIAGE BOLTS, MACHINE  
BOLTS, LAG BOLTS, NUTS, ETC. ALSO  
STOVE RODS, SMALL RIVETS AND  
HINGE PINS. CATALOG ON REQUEST.

THE KIRK-LATTY MFG. CO.  
1971 W. 85th St. Cleveland, O.

## IRON AND WOOD STOVE PATTERNS

QUINCY PATTERN COMPANY  
QUINCY, ILLINOIS

## PATTERNS FOR STOVES AND HEATERS

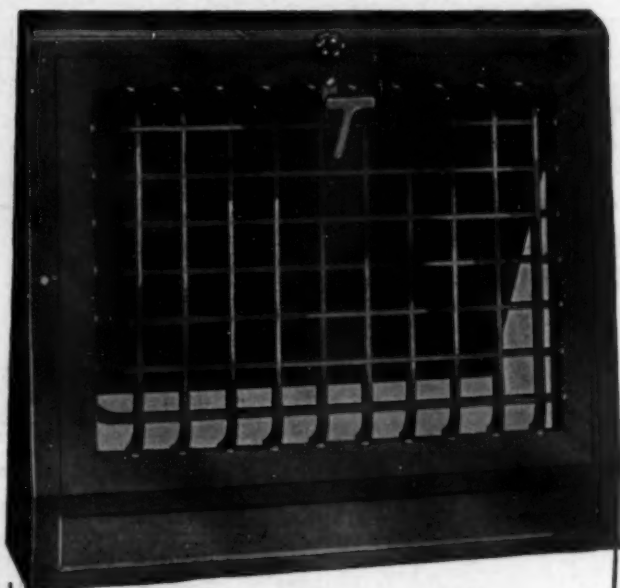
THE CLEVELAND CASTINGS PATTERN COMPANY  
CLEVELAND, OHIO

## PATTERNS

FOR STOVES AND HEATERS  
VEDDER PATTERN WORKS  
FIRST-CLASS  
IN WOOD and IRON  
ESTABLISHED 1835 TROY, N. Y.

Mention AMERICAN ARTISAN in your reply—Thank you!





*Have you seen it?*

## WALWORTH

### New Standardized

STYLE B

### Baseboard Register

NOT only made throughout in accordance with the rules of the Standardization Committee but it is the *neatest* durable register ever made to sell at a popular price.

Simple, easy and accurate in operation, cast face made of the best iron, finished in all the popular finishes and made in the following sizes:

8x10	inch	2 1/4	base extension
8x12	"	2 1/4	" "
9x12	"	2 1/4	" "
10x12	"	3 1/4	" "

*Study the features of this new register.*

Write today for full particulars and prices on the Walworth New Standardized Style B Baseboard Register.

Order some for that next job—your customers will want them.

*Made by the makers of Walworth Double Gratings, Semi-Steel Registers, Side Wall and Floor Registers, Ventilators, Borders and Casings Rings.*

## THE WALWORTH RUN FOUNDRY COMPANY

West 27th Street and N. Y. C. & St. L. R. R., Cleveland, Ohio

*Distributors:*

ROBINSON FURNACE CO., Chicago, Ill.

HART MFG. CO., Louisville, Ky.

PHILLIPS & BUTTORFF MFG. CO., Nashville, Tenn.

*Eastern Representative:*

PENN TINSMITH'S SUPPLY CO., Philadelphia, Pa.



"MORE HEAT FOR LESS MONEY"

### Excelsior Standard and Frictionless Steel Baseboard Registers



STANDARD



FRICITIONLESS

Individually packed with stackheads

Installed in less time  
than any other make

### REDUCE WITHOUT A REDUCER



Self-Positioning patented Stack Head with patented Top Collar and Reducing Wings furnished on sizes No. 3/4 and larger enabling any one of two or three sizes of Pipe to be used for extension to second floor without a Reducer.

All Regular Sizes — Standard Finishes

Prices Exceptionally Low

NO EXTRA CHARGE  
FOR EXCELSIOR QUALITY

*May we quote you?*

The  
Excelsior Steel Furnace Co.

118 S. Clinton Street

CHICAGO - ILLINOIS

Published to serve  
the  
Warm Air Furnace,  
Sheet Metal, Roofing,  
Stove and Hardware  
Industries

Founded 1880

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CHICAGO, MAY 8, 1926.

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### AN ACHIEVEMENT

An explanatory note regarding service to readers of AMERICAN ARTISAN. This paper is now nearing the completion of a half century of service. For almost fifty years it has catered to the needs of the men in the industries which it represents. At no time during its long and successful career has AMERICAN ARTISAN been in a better position to render complete, adequate service to its readers than it is today. In addition to the matter contained in our regular weekly publication, we maintain Service Departments for the use of our readers. If you have a problem to solve, we courteously invite you to submit it to us for solution. In what better way can we learn of your problems than from you direct?

# The Convention of The National Association of Sheet Metal Contractors

**Louisville, Kentucky, May 24 to 28**

will be reported (as usual) in full detail in AMERICAN ARTISAN  
issue of

**May 29th**

This Convention promises to be one of the most valuable and best attended National Sheet Metal Conventions on record.

The story of this Convention will be of special interest to every live sheet metal contractor and warm air furnace dealer in the country and they will look to AMERICAN ARTISAN for the earliest and most complete report.

Manufacturers and Jobbers will find the May 29th issue of AMERICAN ARTISAN, carrying this Convention report, *an especially desirable number* for reaching the most worthwhile buyers.

**Use additional advertising space  
in this issue—send the order  
blank attached.**

**We will be represented in your  
May 29th**

**NATIONAL SHEET METAL CONTRACTORS'  
ANNUAL CONVENTION ISSUE**

Reserve Space Checked

- |   |   |
|---|---|
| <input type="checkbox"/> Double page 2 colors<br><input type="checkbox"/> Double page 1 color<br><input type="checkbox"/> One page 2 colors<br><br><input type="checkbox"/> We will send copy and cuts.<br><input type="checkbox"/> You are to submit copy.<br><input type="checkbox"/> Send us detailed information regarding American Artisan and its results producing powers. | <input type="checkbox"/> One page 1 color<br><input type="checkbox"/> One-half page 2 colors<br><input type="checkbox"/> One-half page 1 color<br><br>Signed _____<br>Address _____ |
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**AMERICAN ARTISAN**

**620 South Michigan Avenue**

**Chicago, Illinois**



# FALSE ECONOMY—The Most Destructive Force in Business



Compare Lamneck Products with others in appearance, in materials, gauge and workmanship. Put them together. See how snugly and sturdily they fit. Do this. Write for a sample. Get our catalog. Just fill in or pin to your letterhead and—

**Mail This  
Coupon Now!**

THE W. E.  
LAMNECK CO.

Gentlemen:

Kindly send me at once, free and without obligation, the items indicated below:

- ( ) Your New Catalog.  
( ) Sample of .....

Name .....

Address .....

Only constant vigilance and strict adherence to a quality standard can overcome the evils of False Economy, whose attractive promises and shoddy performance have led many a business ship to the shoals of disaster.

**E**XPERIENCED executives recognize this ever present danger. They know that the price of cheapening quality is all too dear—that reputation honestly won by years of endeavor may be lost by a single transaction failing to "measure up."

Don't be blinded by "price buying." Adhere to quality. Compare the product before you buy.

Examine Lamneck products from every standpoint. Compare them with others. Have us tell you of their time and money saving features. Have us show you how they cut stock investments in two.

Lamneck Pipe and Fittings are sold at quantity production prices—prices as low as good products can be sold. To build better products and sell them for one penny less is an economic impossibility.

They are designed by skilled engineers, made by expert labor and turned out on patented machinery especially designed for the purpose. Skill, experience, and expert workmanship can make no better.

Lamneck saves time, reduces stock investment and assures satisfaction. Our 48-Hour Service backs the line. Write for samples or catalog.

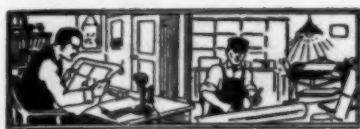
**THE W. E. LAMNECK COMPANY**

416-432 Dublin Ave., Columbus, Ohio

Western Representative: THE QUICK FURNACE & SUPPLY CO., Des Moines, Iowa

# LAMNECK PIPE AND FITTINGS

Say you saw it in AMERICAN ARTISAN—Thank you!



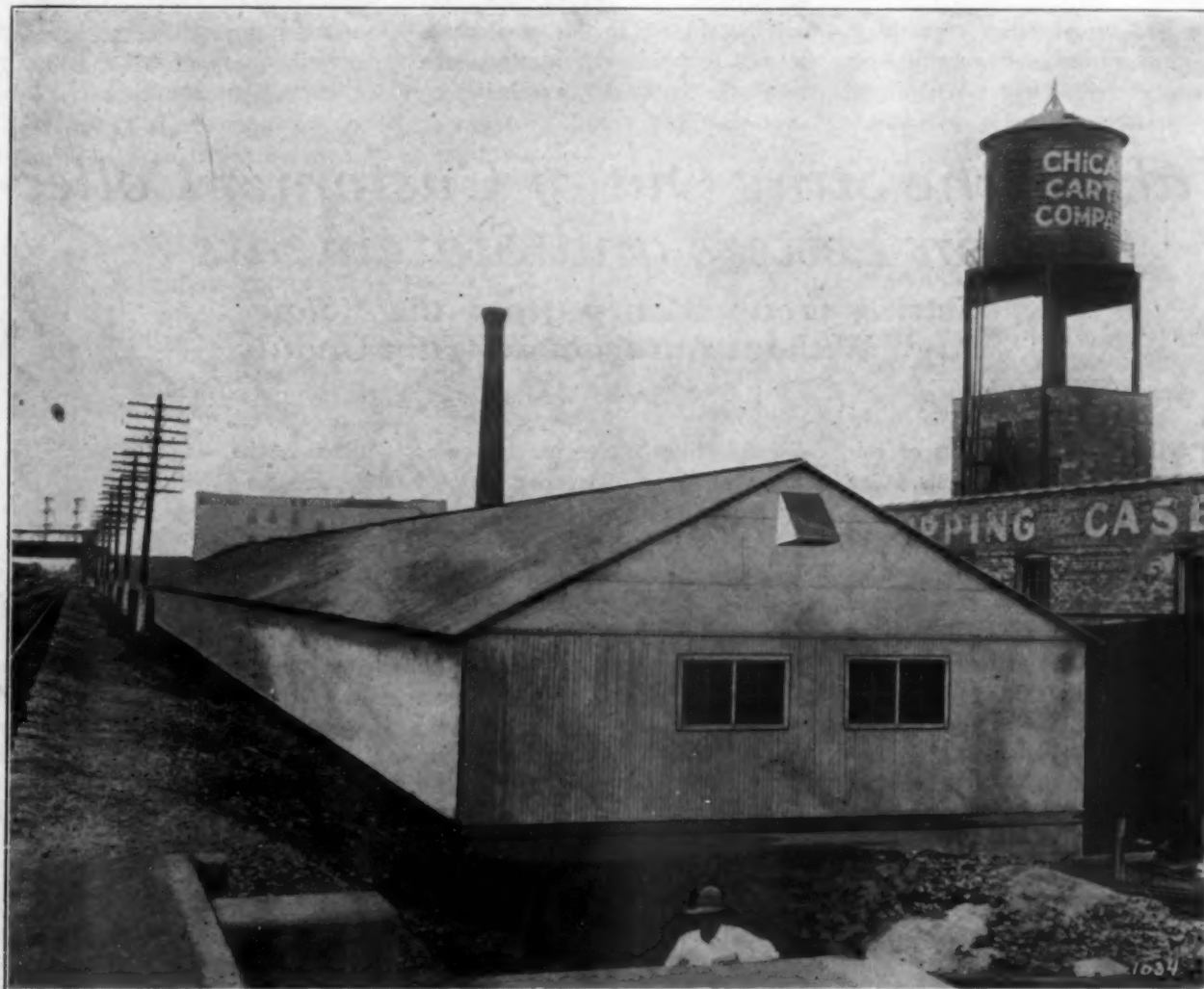
# American Artisan and Hardware Record



Vol. 91.

CHICAGO, MAY 8, 1926

No. 19.



Carton Warehouse Made of Sheet Steel and in Use by the Chicago Carton Company. It Is Easily Erected in an Emergency. It Is Rust Resisting and Fireproof

## Sheet Steel Structure Serves as Warehouse for Paper Carton Company

*Firm Finds Portable Structures Great  
Convenience in Storing Its Wares*

**S**HEET metal products are rapidly forcing their serviceability and fire resistant qualities to the attention of large industrial plants.

There are countless instances of where a sudden wave of prosperity has come to a particular industry,

taxing the normal facilities of the manufacturers in that industry. These latter are compelled in a short space of time to enlarge their producing equipment and in order to house the added facilities quickly they turn to the corrugated sheet

metal structure, which can be erected over night.

In the case of the Chicago Carton Company the urgency was for a fire proof warehouse where in large numbers of cartons could be stored, preparatory to the large demand that

will be made on the industry when the canning industry gets into activity.

As so often happens, these structures are erected in an emergency. They fill their purpose, but after the emergency has ceased to exist, the sheet metal structure goes right on serving the employer. It has been found so convenient, so useful and so easily erected and taken down

that for warehouse purposes it is ideal and is soon in permanent use.

In the case of the Chicago Carton Company, its product is inflammable. A stray spark from switch engine happening to get in among the paper cartons would soon lay the entire stock in ashes. Therefore the sheet metal structure in this case serves a dual purpose. It protects the goods on the inside from being ig-

nited from without, while on the other hand a fire starting on the inside would be confined to the single building, thus preventing a general conflagration.

As an emergency structure the portable sheet steel building is far superior to any other. Nothing can surpass it in ease of erection. It is perfectly fire proof and its longevity of life is unquestioned.

## Taking the Sting Out of Customer Collection Letters and Statements

### Getting Your Money from the "Slow-Pay" Without Antagonizing Him Unduly

By RICHARD WALTER

THERE are many ways of collecting overdue accounts. One way is to use a club, diplomatically camouflaged. The trouble is that the club is usually obvious, no matter how carefully it may be concealed in a bouquet of verbal persiflage. Yet the wise business man knows that the old adage about molasses catching more flies than vinegar applies to this end of the business as well as to the sales department, and that fundamentally the problem of collecting is the same as the problem of selling.

Some business men, of course, hold that no collection plan of any moment can be built around any other idea than one that gets the money, irrespective of the method employed in getting it. It must have been such a man whose palm itched for the dollar who wrote the following:

"Gentlemen:

It has been brought to my attention that there is a balance due on your account of \$7.50. We can't understand why a firm of your standing should allow a balance of this kind to remain unpaid for more than sixty days. We can't afford to spend the time trying to collect such small sums and will expect your check by return mail."

A letter of this kind is a "horrible

example," but not so uncommon as might be supposed. It was dictated by the writer's emotions and not by his business judgment. He allowed his feelings to run riot and the result is a letter that makes the customer-debtor hot under the collar. The inactivity of many a good account dates back to the morning when the head of the firm represented by the deceased account opened and read just such a communication.

A business is made up of customers and a customer lost can never be replaced. If you do get another one, it simply means that you should have had the additional customer in the first place.

In the light of such losses of the good will and business profits, the firm that feels that its collection losses are few and the overhead in this department low might be surprised by an honest analysis of the fact. True, you may collect 95 per cent of all your accounts payable, but *what did it cost* to do it? What did it cost in lost business? Are you paying for the upkeep of a "collection" graveyard?

It is no argument to say that you don't want slow pay customers on your books, that they are unprofitable. Every slow pay account was at one time a prompt pay account, with few exceptions, and the deadbeat was once a good customer,

otherwise he wouldn't be on your books. The point, therefore, to consider is how good a customer he might have been if he had been educated to pay promptly—helped instead of dunned. A different kind of appeal, a different approach, a more helpful attitude might have produced a different result. The old ways are not always the best ways. Changing conditions require changed tactics to meet them. Familiarity breeds contempt today as surely as it ever did. The "stop-look-listen" signs at railroad crossings are a good example of this. These signs have been in use for nearly thirty years and yet investigation showed that deaths from violent collision at railroad crossings mounted every year. It was a case of familiarity breeding contempt and ending in disaster. The railroads decided to try a new appeal and so they have adapted a new slogan, which reads: "Stop—you may lose." Apparently it isn't so good as the old one, but it has one virtue—it is new.

What most collection methods seem to lack is lubrication plus the milk of human kindness and tolerance. Most collection methods irritate. They actually build a wall of antagonism between creditor and debtor where friendship should be.

Of course, a deferred obligation can't be treated as a joke. Care must be exercised that the debtor

This article has been written by Richard Walter, Manager Times-Mirror Stationery and Office Supply Company, Los Angeles, California, in the interests of better collection methods.



doesn't mistake friendliness for leniency. But there is a *humane* method—a method that is result-getting and where the combination of ideas used is calculated to bring the greatest possible pressure to bear with an inexorable follow-up that is courteous, but which never loses sight of the fact that there is a bill to collect. This unique method will be described later on in this article.

Meanwhile let us analyze the situation as between the customer and his creditor. Obviously the customer

must be made available for use in our own business. What is needed is a little lubricant, tactfully applied at the right time to *induce* the customer to pay promptly. The customer must think that he is paying the bill voluntarily and not that you are collecting it. Get the point? Therefore, we must do something more than merely mail the debtor a statement on the first of every month. He doesn't like statements and on the first he's getting a lot of others besides yours. So we must

and rightly so, that his name on your books represents only so many dollars, when it ought to represent another human being.

This idea of inducing the customer to pay pleasantly is the basis of a series of notices shown and which are the basis of a follow-up idea that "gets the money" and builds business in one operation.

Financial difficulties are usually caused by regular customers who pay their bills irregularly. Now the regular customer is the sort you can't afford to offend. To get the money he owes you is a delicate procedure. An appeal to him based on the argument that you "need the money" is fatal. It puts you on the defensive and the debtor may feel in his own mind that he needs the money just as much as you do. The fact is that he has borrowed the face value of your invoice, without interest, for thirty days. No bank would do business with him on that basis.

Yet many customers seem to think that you should be mighty grateful that they give you any business at all. This attitude is the result of laxity in regard to the enforcement of credit terms. A consistent follow-up started immediately after the account is due, expressing good will while tactfully suggesting that the bill be taken care of, will act as a lubricant and induce prompter payment.

This is the idea behind the method now being used by the writer of this paper. It consists of a series of appeals which unlock the purse. They are in the form of stickers attached to outgoing statements.

Yes, I know the idea isn't new. The application of it is new, however. The Chinese invented gunpowder, but the white man put it to constructive use. All that the Chinese could do with it was to make a lot of noise. So with this series of stickers. They embody ideas tested by experienced men all over the country and exercise the greatest amount of pressure.

Color is used to give life and interest and the debtor is always in the picture, so to speak. A writer once said that if he wanted to sell a



Illustrating the System Employed

has the advantage. The goods are in his possession or he may have disposed of them to others. He knows that to force collection by legal means is both tedious and expensive. Therefore, it is necessary in dealing with him to exercise the greatest amount of tact and persuasion, without arousing too much "paying resistance." We have heard a great deal in times past about "selling resistance," but how about its twin "paying" resistance? It is just as real. A man dislikes buying goods and he dislikes having to pay for them just as strongly. Therefore, let us face the situation as it is and find out what the logical procedure is to overcome this "paying" resistance. We must turn it into paying desire. Capital tied up in small accounts

remind him oftener than once each month. He mustn't be conscious of our insistence, but he must be made aware of the importance of paying that particular bill in preference to all the others he owes.

This is just where most collection "systems" as such fail. They are too obvious and just the minute that a debtor is conscious that he is being made the subject of collection experiments or systems he is likely to become more stubborn than ever. A prepared series of collection letters (we've all received them) leaves him cool and unresponsive. And why not? Most of such letters are prepared by attorneys and would scare a wooden Indian to death. They lack the sincerity of a human appeal. The debtor feels,

man a picture of Niagara, that he would photograph it with the man in the foreground. That is human nature. Did you ever buy a photograph of a banquet if your face didn't appear in the group? There's a psychological twist about the appeals embodied in these stickers which "compels action. There is a friendly compulsion, yet soothing—nothing to ruffle a man's temper under the urge of sending a check now.

Thus, by being human and getting away from the conventional phrases such as "please remit at once" or "your account is long past due" and other hokum, which antagonizes the customer, the method brings unusual results. The follow-up gets under the debtor's skin in a friendly, insistent way that he can't ignore.

The first of these stickers is No. 20, because it goes out on the 20th of the month. By waiting till the 20th customers have ample time to mail their checks. Then a duplicate statement is sent to slow pay customers and the notice attached reads as follows:

"Haven't you forgotten something? A check for \$. . . . . to cover our last statement. Thanks."

The next sticker, No. 30, is attached to the regular statement sent out on the first of the following month and goes to the customer who is thirty days in arrears. It reads:

"We will appreciate a check to cover our last statement. Won't you please respond to this friendly reminder? Thanks."

Sticker No. 40 goes out on the 10th of the month following due date. It reads:

"We are still looking for your check to cover our statement of . . . . . for \$. . . . . We feel sure that we can count on you for a remittance by return mail."

If this pictured appeal seems too humorous try typing it on your letterhead minus the picture and you will admit that it is a strong bid for payment. The illustration draws the sting from the appeal and provides an added touch that builds good will.

The limited space allotted to this article precludes a detailed description of each sticker. Each of them

is designed, however, to do one particular thing at some one time. Each

succeeding sticker is in logical sequence, hence their effectiveness.

## Masonic Temple, St. Louis, Employs 200 Tons of Sheet Metal

### Heating and Ventilating System of Most Modern Type Installed

THE construction of the New Masonic Temple, St. Louis, Missouri, is a master piece in architecture. It is of particular interest to the sheet metal contractor because in its construction 200 tons of sheet metal are being used. The principal

is given a modern touch with a setback feature. While the building is nominally only five stories in height, it is actually the equal of a twelve-story building. It contains a complete theater with seating capacity for 2,200, an auditorium 160 feet



Exterior View New Masonic Temple, St. Louis, in Which 200 Tons Sheet Metal Are Being Used

use of the sheet metal has been the construction of the heating and ventilating system.

This masonic headquarters building follows the lines of a Greek temple in its Ionic architecture, which

by 75 feet for the Knights Templar Commandery, 11 lodge rooms, three for the Eastern Star chapters, 25 offices with separate entrances for each chapter, and a kitchen and dining room in the basement with a



seating capacity for 2,500 people.

The installation of the heating and ventilating system is being done by the Sodemann Heat and Power Company, St. Louis. Each system is entirely separate and independent of the other; in other words, the heating system can be operated in its entirety even though the ventilating system is not used and on the other hand the ventilating system may be operated, even though the heating system is not used. Certain portions of the building will be served by both the heating and ventilating systems, while there are other portions which will be served by either the heating system or the ventilating system. This depends on the location of the spaces and the purposes for which they are to be used. Lodge rooms and other meeting places are on the inside of the building without outside exposures. These will be supplied entirely by the ventilating system, that is to say they are heated and ventilated in one operation. There are other spaces again that have a great deal of outside exposure, which will be taken care of by direct radiation.

Each of the lodge room floors, also the spaces set aside for the commandery and those for the Chapter and Council, have their own individual ventilating systems, so that either one of these may be operated independently, and alone or all of them together. This is a very flexible arrangement, as can readily be seen. All air distributed throughout the building is properly conditioned as to temperature, humidity and purity. In winter all air is heated by being passed through steam heated coils, and the temperature of the air is regulated automatically, as may be required by the outside temperature conditions. This automatic regulation also controls most of the direct radiators, so that temperature conditions are not dependent upon hand control.

A considerable part of air is recirculated, and in this connection use is made of Ozone generators which produce the necessary ozone for removing impurities from the air. By recirculating this air, a large saving

is made in the fuel consumption as compared to what would be used if all of the air would be taken from the outside.

All air used for ventilation passes through air washers, so that it is entirely cleansed. During the warm months this air is not heated and its contact with the water results in a reduction of its temperature so that the same system which serves to heat in winter, cools in the summer.

All of the air is handled through motor driven fans. It passes through an extensive system of ducts, and this entire system of duct

work for the complete building, represents upward of 200 tons of sheet metal as stated above. This sheet metal installation is worthy of inspection on the part of anyone interested in this work, because unusual conditions had to be met and especially, owing to the recirculation feature, the work is a splendid example of engineering and construction on the part of the men in charge of this part of the apparatus.

The sheet metal used is furnished by the National Enameling & Stamping Company, and the brand used is Nesco.

## President Markle Makes Appeal for Your Attendance at Louisville Convention

*Says It Is Not Only a Pleasure  
But a Duty to Attend May 25 to 28*

**H**AVE you arranged your plans so you can attend the convention at Louisville on May 25th to 28th?

If you do not attend you will miss something and we will miss you.

At the Florida state convention a member said: "This is the first convention I have attended, but I'll never miss another, I didn't know"—

That's the secret—he didn't know—and you do not know what benefit can be derived from a convention of the National Association of Sheet Metal Contractors unless you attend—so try it, just once, and I am sure you will feel about it the same as our Florida member.

Remember this,—The National Association is *your* association and if you do not attend the convention, you are missing an opportunity to help make your association bigger and better.

When you have paid your dues or per capita tax, you have not done your full duty by your association; you have done the least that you can do, but as you attend and take an active part in the work of the association, you will get a clearer conception of the great work to be

done to elevate the standards of the industry, and you will derive greater benefits for yourself in such measure as you serve your association.

The Louisville association has made great preparations to entertain the delegates and visitors who will attend the convention.

They expect you to show your appreciation of their efforts by attending. Do not disappoint them.

W. C. Markle, President.

### American Metal Market Issues 1926 Copy of Metal Statistics

The American Metal Market has published the 1926 issue of Metal Statistics. This is the nineteenth annual edition.

This book contains a complete comprehensive statistical review of metals. In addition to the regular statistical information on ferrous and non-ferrous metals contained in previous issues various new tables have been added.

The book contains buyer's directory and index to advertisements. Copies can be obtained from American Metal Market, 11 Cliff Street, New York. The price is \$1.00 per copy.



# Illustrating Construction of Pattern for a Leader Head Cover

*Some Such Covers Merely Ornamental—  
Edges for Seaming Allowed Extra*

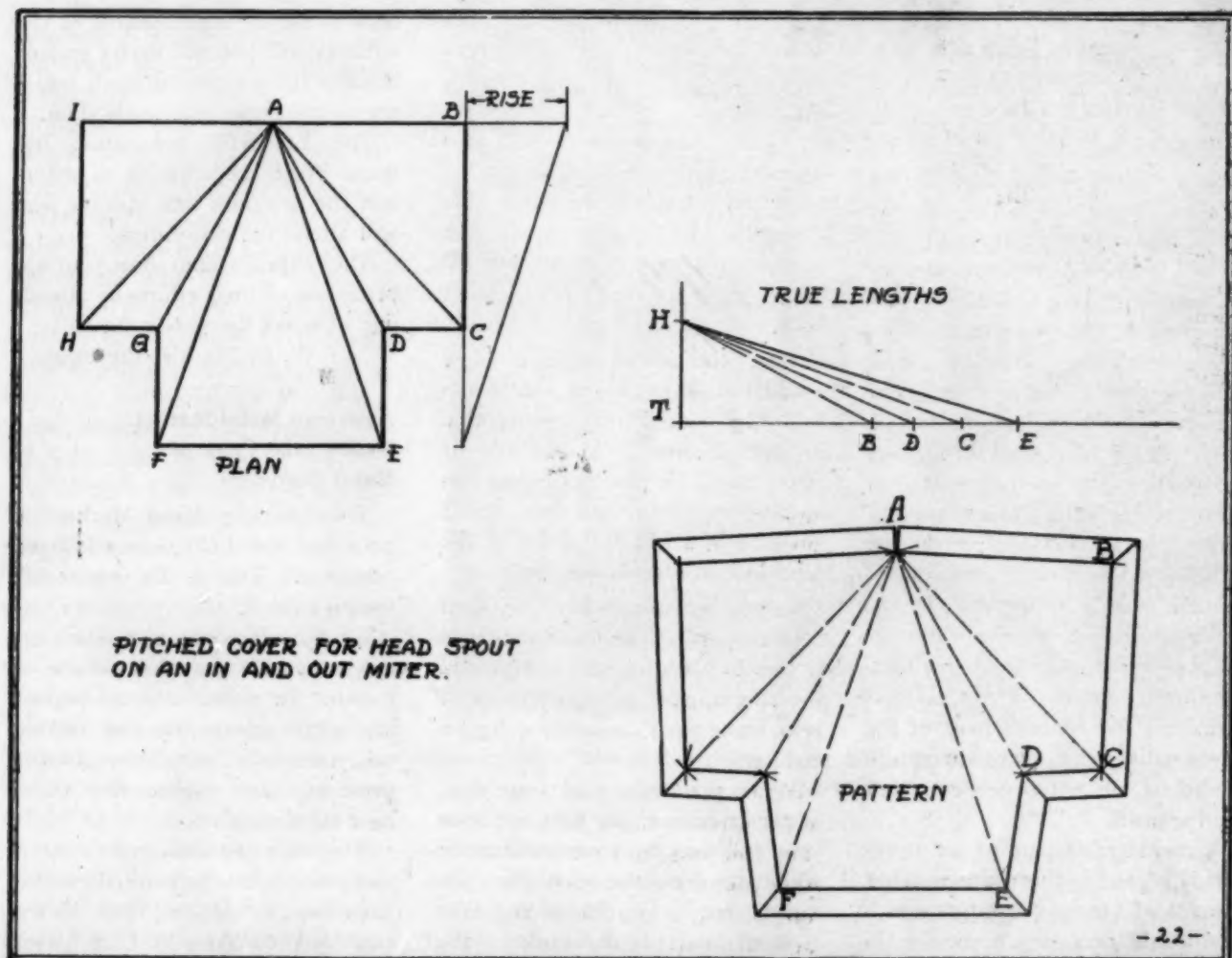
By O. W. KOTHE, Principal, St. Louis Technical Institute

**N**OW and then leader heads are made with an off-set in the front, as our plan indicates, where a pipe passes through, and for this a cover is often made. Many of these leader heads are just ornamental and, therefore, the top is covered over, while a pipe passes down through and the water flows down the pipe. There are others where the leader head is used to contain water and as a sort of vent head to prevent the sewer gases passing up through the gutters and so eating away the tubes and such other metal work. But here we

have a cover with a rise equal to the diagram, as shown on the side of plan. This rise is placed as H-T in our diagram of true lengths and we pick the plan lines as A-C, A-D, A-E, A-B and set them as T-C-D-E-B. Then lines drawn to H will be the true lengths.

In setting out this pattern we draw any line, as F-E, and using true length H-E, we cross arcs in point A. Then we pick the side line of plan, as E-D, and using E in pattern as center, we strike arc as at D. Cross this with true length H-D and use A as center. Next

use the line D-C of plan and place it as DO-C in pattern. Now take true length H-C and, with A as center, cross arcs in point C. After this pick the plan line C-B and set in pattern as shown. Cross this with true length H-B and then join all points where arcs cross in pattern. Edges for seaming are allowed extra. This cover is generally planed over or else soldered on the top edge. A hole that is cut in for the spout should be cut a little smaller and a small flange turned up on it and well soldered so no water can follow the pipe down and so lodge



Patterns for the Cover of a Leader Head

in the leader head which would freeze and burst the seams during

the severe cold weather which is bound to occur in winter.

## How Sheet Steel Trade Extension Committee Is Helping Contractor\*

### Contractor Should Use Sheet Metal Cornices on His Own Buildings

By GEORGE L. BENNETT, Sheet Steel Trade Extension Committee

I HAVE had the pleasure of appearing before some of you before, and in a way I feel I am among old friends. I don't feel quite as nervous as I otherwise might, and so as not to mislead you gentlemen, I ought to outline what I am going to say so that you will have the opportunity of deciding whether you want to go out in the corridor and smoke and skip this business, or whether you want to listen to it:

First—We have for consideration the state of the trade.

Second—Costs to bring that state about.

Third—What can be done, what is being done, to benefit that condition.

Fourth—What we should do, and what you should do.

Now then, the condition of the trade is that it is not what it might be. We live on the edge of an extremely wonderful development of sheet metal, and the question is—what are we doing to realize that development? The lumber business is dying. Much of the supply is coming from the forests of other states, now, and it won't be another fifteen years before we will be dependent to a large part on foreign lumber, which is a delicate situation for a country like the United States.

But sheet metal is coming in to take the place of lumber, not only because of the failing supply, but because of the fact our building trades are the highest paid men today for people of their class. You won't find in any other country, men

getting as high as \$17.00 a day for doing building work.

That situation is one we want to continue, for high-priced men make for high-grade men, and this country above all things else, wants to build citizenship.

Now then, that being the case, we must use this money economically, and that means that a great deal of work which was done on the building in the past, must now be done

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*In this article Mr. George L. Bennett of the Sheet Steel Trade Extension Committee has outlined the progress which the Sheet Steel Trade Extension Committee has made during its twenty months or more of existence. He has shown how the Committee is helping the sheet metal contractor in producing more business for his shop.*

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*He has also shown how the sheet metal contractor can re-organize his facilities so as to take care of a larger amount of business.*

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somewhere else. A man may accomplish much more in the factory in a day, where he has efficient tools to help him, than it will ever be possible to do in the building. I have been on buildings, was brought up on them so to speak, at the time when the shelving came on to the job planed on two sides, rough on the edges, and the mechanic worked it out in the building. That was all done there. Now that condition is changed.

Let us consider why the field of sheet metal has not advanced so far

as it might be. I want to say, as far as you men are concerned, either you are making too much money or you are too well satisfied with what you have been making. I am saying that to get under your skin and get you thinking.

This sheet metal business, which was such a craft some years ago and then has gradually drifted along down until it has gotten to be—I would not just like to call it its proper name in some places—a thing many people used to take pride and delight in. Many of you men were highly pleased with yourselves when you could develop something in the form you required in your shop. You became a master and you had pride in your business. There came along the war, and there were certain destructions,—one of the things destroying your pride was cost plus—built to get price, without really putting up the price, came in there. A great many people drifted away from the materials they had used, drifted away from sheet metal and took up the service of strange gods. Now that is the condition—and don't think that is peculiar to yourselves at all—the trade has gone bad and all the bad things are not due to the sheet metal contractors. For ten years prior to 1924 there had been talk among the manufacturers of "getting together."

Let me speak for your attention concerning the trade promotion committee in a mobilization way. We stand in between. We are hired by the manufacturers themselves, not by any one, but by the Association. But we are there to improve trade conditions. Not all of the work which we do is to be done through an outside force in the trade, leaving the manufacturers without having any chance to participate in them. We recognize that cannot be done, and they recognize that cannot be done; so we stand as a mobilization force representing to them bad conditions, trade practices,—we bring about changes where they can be brought about, and at the same time we make representations to the jobbers and manufacturers and

Excerpts of address by George L. Bennett, of the Sheet Steel Trade Extension Committee, delivered before the convention of Pennsylvania Sheet Metal Contractors.

salesmen to bring about better trade conditions.

That for a little word of explanation as to where we stand. Now drop all consideration of us, except as I may allude to the consideration of the work we are doing for you; and turn for further consideration to the field itself. That field is kind of a sick field—sheet metal is kind of a sick field. Let us see what is the reason. That is the false economic policy or the false economic principle that competition is the life of trade. Competition is not the life of anything. Struggle, unless done in a spirit of sport and fairness is a weakening process. And that has been what has happened in sheet steel and sheet metal in competition with itself. There has been that weakening process, the process which competition brings about. The biggest thing perhaps which came out last year was the recognition in "The Nation's Business" of coöperation as a principle exceeding far in its beneficial effects, any beneficial effects which come from competition.

So we are here gentlemen, to aid you, to coöperate with you. What form should that coöperation take. If there are only two jobs to be let in a town and there are eight contractors there, there is going to be some pretty keen competition. But if somebody should come along and point out six or seven other jobs that could be had which these fellows had possibly overlooked, there is a possibility each one of these jobs could be had at a reasonable figure. In taking a job you are between the devil and the deep blue sea. If you work up overhead costs and all other costs without a sense of their true value, you make life easy for yourself, but you distort your services to the public and the net consequence is you may lose your usefulness to the public, which is a very great danger.

Today there is no one material on the market anywhere which, alone, can serve the public.

There is one item of overhead, I don't know as you have included much, and it is an element you can-

not succeed without. It is not rent, nor insurance, nor seventeen other things.

Some of you men are dissatisfied with selling expense and selling effort, because it does not bring you results. You say: "I went out and spent two or three hours and did not get it, and I am off of that sort of thing." The boss might have learned the trade and understood the mechanical side of the work and how this is to be done, but as time goes on there comes to him the question of what construction lasted, and what cost less for maintenance and upkeep, and first cost, and the question of the means of obtaining this business.

It is a common saying that all selling is teaching. You men who would sell sheet metal must first teach it to the architects, you must teach it in the schools of the country, to the householders and all his neighbors, and must have a means to sell it.

We drove up from Johnstown, and we did not pass a sheet metal business housed in a sheet metal shop, or a shop with a sheet metal cornice on it. That is not teaching. I believe in sheet metal, I use it myself. No; they were housed in wood, and had slate roofs,—and I am not talking of you men, because I am talking to the better men of the trade.

I will speak a little about the things we are doing to coöperate with you, and I want to come back and speak about what we would like you to do, something to coöperate with us. I want to tell you how essential I think you are. You men are on the firing line.

We personally have a feeling that the woman who bears a child and gets it so it can toddle around, and then leaves it to shift for itself, is not much of a mother. We carry that feeling a little further to the man who creates a business and then does not pay a bit of attention to its maintenance and upkeep. Why should not the sheet metal worker have a tickler file, and six months after the job was put on he would turn a page over and there it says:

"See John Smith about painting that roof." He finds another card: "See about painting the gutters." So that child is not thrown out on the cold world to forage for itself without some attention.

There are certain things which unlock opportunity. Yes, probably an interest in other people's affairs is one of the most potent things to unlock opportunity.

Now there are certain things which have stood in the way of a larger use of sheet metal. One has been the lack of interest on the part of the people. Approximately thirty-five per cent of the money spent for building in this country is spent under the direction of architects, and yet despite that small amount those men set the fashion, and in that way they have an importance far beyond the amount of work which they directly control.

The public who work without architects, still follow the appearance of the buildings around them. We have tried to do our part in every way, we won't fail to continue to try. We have taken space in the recent issue of Sweets Architectural Catalog. The articles were mainly arguments to the architect bringing his mind around to the real virtues of sheet metal—two pages devoted to argument on roofing, on why sheet metal roofing is superior to other roofing. If you men have not had these, you won't waste the price of a one cent postal card if you ask the Sheet Metal Association, Oliver Building, to send them to you. If you do not have them, you are without a tool in your kit when going to the architect, that would be of a great deal of importance in swinging the architect into line. We are doing the same thing with Sweet's Engineering Catalog, we are out there with three pages directed primarily to the reasons why sheet metal should be used in buildings instead of the so-called permanent forms of building such as brick and concrete construction, directly appealing to the architects who plan these buildings.

We are putting out specifications for sheet metal work. The first of



these, for sheet steel cornice work, is ready to go out. In that we are pointing out to the architects these facts: That there is a possible great saving on a building where the price is close by the use of sheet steel cornices instead of terra cotta cornices or stone cornices, and the reason given that the sheet steel cornice is a better cornice; and there is a plea made there that they shall not attempt to permit a competition with the sheet steel makers nor with the other makers to the end of getting the cheapest sheet steel, but to call for the highest kind of sheet steel, and we give them specifications which does call for a high-grade of sheet steel cornice, and I ask you men when you make your next cornice, to produce a good article and charge for it accordingly.

We have seen a very nice field in the study of the metal garage. As it stands today, the steel garage is a tin can,—you would not want to see it,—and yet the possibilities are there of something pretty nice that has never been realized on. To further that, we held an architectural competition, and we got some designs from that. We have a big lot of these garage designs which I judge will be out within about thirty days, to be sent to you sheet metal contractors, gratis. After it is sent to you men it will be edited in the 34 publications we advertise in, and the people will be invited to send for it, and when they send for it their inquiry will be sent to the sheet metal worker who has expressed a desire to have something to do with these sheet metal garages. A two-car garage in this sheet steel is getting, for all sorts and sizes, from \$125.00 to \$300.00 or \$400.00; the concrete block garage with a couple of windows and a tar paper roof on it, \$750.00 or \$800.00; brick, similar to the concrete block, except brick, sells for \$1,000 to \$1,200. Now between these prices these sheet steel cans have been getting at \$350.00, and \$850.00 to \$1,250.00 for the concrete block and brick garages, there is a wonderful margin of profit, and you don't have to absorb a large part of that margin

to make a better garage because there is approximately the same amount of sheet metal.

I want to refer to the building code of the various cities of the United States, put up by engineers as a protection to the public largely as regards to the lack of safety as regards fire. They have been perverted in a great many instances by private interests. In Chicago the metal ceiling is regarded by the plasterers as a finishing coat and that is all. That has gone rather far. What are we doing to prevent that? Well we got digging into that thing and we found a large part of that thing is due to the idea, the fancy you

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*In this article Mr. Bennett has further pointed out what the Sheet Steel Trade Extension Committee is doing in the way of enlarging the market for sheet metal.*

*He has outlined a plan of producing more attractive sheet steel garages and cornices. He has also told what the Committee is doing in the way of arousing the architect to a greater appreciation of sheet metal.*

*He urges that the contractor utilize every opportunity to tie up with the national advertising now being done by the Committee.*

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might say, of certain people in the National Board of Fire Underwriters somewhere, when dust explosions first attained prominence—when explosions took place in the mills or in the mines, the terrible danger of dust explosions was brought to their attention at their meetings, and dust was dust irrespective of whether coal dust or stone dust, which of course was erroneous. Coal dust is explosive and stone dust is not.

The fire tests today are set up on time endurance. Metal lath has stood one hour and fifteen minutes, and under their rules that is given a one hour rating; cement, three-

quarters of an hour. For certain other buildings, the use of metal lath is mandatory and for a strictly fire-proof building the test is three hours. Under the same basis the metal ceiling gets about a four minute rating, so the metal ceiling is down and out. What is the answer? It is not that they say so or that they think so. What we have to have is facts, and in the process of working for those facts we have recently sent out requests to the manufacturers of metal ceilings and gathered some two thousand samples of dust, each one testified to that it came from the top of a metal ceiling, the length of time it was up and the sort of floor above. We have arranged with the Bureau of Chemistry at Washington, the biggest authority on dust extension tests, to make our tests. They will not test every one we send. We will send them two thousand samples and they will test probably thirty samples. And they can take their thirty or forty or fifty determinations and make their whole determination on that basis.

We have taken part in a series of tests before the Bureau of Standards at Washington on metal roofing against wood roofing and against asphalt roofing and against roll roofing. That has been completed and we are now digesting the blue prints which have been forwarded to us from Washington. We expect to make that contrast.

Take the city of Buffalo code. Because of appearance, the building codes have been changed to keep out metal garages. No one wanted to see his neighbor put up anything which he thought would be detrimental to the appearance of his own property; and so the building codes have been made which has kept the metal garage out. We are running tests in connection with the Bureau of Standards next month which will determine what distance it will have to be placed from a wooden building to keep away from danger of fire.

There is a feeling among industrialists today that the man who strives to be the whole thing does not succeed. It is, gentlemen, the coöperative effort of every man,

each working independently but each having a loyalty for the same thing. It is not being led by one man, and if something happens to him they are like a pack of dogs without a leader. But where there are many minds all working together, that will stand and grow like a forest of young trees.

I am going to ask you men to think of the Sheet Metal Trade Association as your friend, somebody that wants to help you, that believes in you and takes up cudgels for you but without talking about you behind your back and will say "with all his faults he has faced conditions."

Just two instances of things we are doing to help. You may have confused to a degree a shortage of good help and a lack of knowledge on the part of the incoming generation, of sheet metal or knowledge on the part of the incoming generation of such materials as concrete.

Another thing: We spend a quarter of a million dollars a year advertising to the public in behalf of sheet steel, and what sheet steel does for the public. Now the effect of that can be nullified by you men in a great many cases because, for instance, John Smith after reading some of these advertisements comes to Mr. Tinner and says, "I have been thinking of putting on a roof like the sheet metal people are advertising" and Mr. Tinner says, "Oh yes, we know about these things, but there is nothing in it; don't you do it now." John Smith says, "Why not," and Mr. Tinner says, "Oh well, the material is not what it used to be." Just about that time everything that has been done in the advertisements is nullified for he thinks he has inside information that it is all bunk.

There are two factors at work there. Out of a thousand houses built fifty years ago, maybe nine hundred and fifty of those have disappeared for one reason or another, and fifty of them survived. We look at these fifty, and we say, "My God, they built houses in those days." We do not look at the nine hundred and fifty that went away, we look at the fifty that are left and

we get a distorted idea of the facts. So we contrast the best of yesterday with today to the disparagement of today, all the time.

I want to tell you of a test made at Providence. A gentleman was a kind of a crank on turn plate. Twelve years ago he set out, on an angle of his window ledge, about twenty-five samples of tin plate. They had two holes punched in them, by which they were held by nails. They stayed out there, and once in a while the old gentleman would go out and he would notice a rust spot on sample 13, and he made a note in his book "Rust hole, sample 13, April 16, 1922"; and he kept an account of this stuff, and little by little all of those samples developed holes except two and one of those samples was an old job, old iron plate which they had over out of dead stock and it had a forty pound coating on it, and that thing today is there without the least bit of a pin hole in it; and the other piece is a piece of steel with a forty pound coating on and is looking just as fine as the other one.

There had to be something done about that thing and so there was a master brand put out and that has been applied so far to galvanized sheets for moderate operation and all that is said about that specification is that it carries as heavy a coating as can be carried without cracking on a moderate forming operation. Companies are beginning to roll that stuff and it will soon be on the market. This is the minimum specification and safeguard to the public; if they have a material with that brand on it, it is a guarantee that the manufacturers are standing back of it with inspectors in the field, going around buying sheets, cutting samples, sending them to chemists and testing that material; that is for the safeguarding of the market, getting away from the comparing the poor material of today with the good material of yesterday.

We have done all we can to help. We want you men to take new courage now. Believe in the vision of the future, put your jobs, your business, your officers in a position to

cash in on it. Believe in the product you are dealing in, and if you go at it in that way the future is won.

#### **Conference of Local and State Secretaries to Be Called at Louisville.**

Secretary E. L. Seabrook, of the National Association of Sheet Metal Contractors, has a few words to say regarding the Louisville convention. He has called a conference of local and state secretaries and state presidents for Monday afternoon, May 24, at the Kentucky Hotel.

This conference, Secretary Seabrook says, will offer an opportunity to discuss different phases of association work, also for the exchange of ideas, methods, experiences relating to the conducting of local and state associations."

The delegates mentioned will readily appreciate the significance of such a meeting and the good to be obtained by attending it. Therefore, do not forget the date—Monday, May 24—and the Kentucky Hotel, Louisville.

A convention of the Kentucky State Sheet Metal Contractors' Association will be held on Monday also.

The Louisville convention committee are emphasizing the fact that delegates arriving by rail should not neglect to secure a certificate allowing them the privilege of the half fare rate. The certificate must be secured at the point of original purchase of ticket.

In order to secure this rate, however, there must be at least 250 tickets purchased. In view of the fact that a large number of the delegates will undoubtedly drive to Louisville in their own machines, the committee asks each one of those who drive down to stop at some town just outside of Louisville and purchase a ticket and secure the certificate. Upon presenting his certificate at the place of registration, he will be indemnified for the outlay he has made. This is being done in order to help those coming by rail to secure the half fare rate.



### Matthiessen & Hegeler Company Issues New Sheet Zinc Base Price.

Matthiessen & Hegeler Company, La Salle, Illinois, has issued price list No. 19. This list gives the base price of sheet zinc to be \$11.25 effective April 30.

### Tinners' Machinery Company Moves to New Location.

The Tinners' Machinery Company, 225-227 North Ashland Avenue, Chicago, have moved their business on May 6th to 100 South Jefferson Street.

This firm carries standard makes of new and used sheet metal and iron working machines and tools, including Pexto and Dreis and Krump machines.

### Sidney F. Stevens, Treasurer, Grand Rapids Blow Pipe, Dies at 79.

Sidney F. Stevens, Grand Rapids, Michigan, is dead at the age of 79.

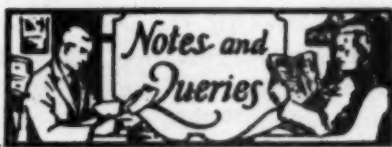
Mr. Stevens was treasurer of the Grand Rapids Blow Pipe & Dust Arrester Company and he was also interested in about a dozen other local enterprises, to which he gave the best service at his command.

Mr. Stevens was born in Lynchburg, Virginia, July 7, 1847, and went to Grand Rapids with his parents, brother and sister in 1854. He attended the public schools of Grand Rapids, being a contemporary of Charles H. Leonard, Gaius W. Perkins, Charles R. Sligh and others still living.

On the death of his father in 1877 Mr. Stevens returned to Grand Rapids, took up his residence with his mother and entered the employ of Foster, Stevens and Company. Three years later, as executor of the estate of Wilder D. Foster, Wilder D. Stevens sold the Foster interest in the business to Sidney F. Stevens, Charles C. Philbrick and Charles F. Rood. The three purchasers formed a copartnership with W. D. Stevens, who was already interested in the business and continued the business under the style of Foster, Stevens

& Company. Mr. Stevens gave both the wholesale and retail branches of the business his best thought and effort as long as he lived.

Mr. Stevens is survived by his brother, Wilder D. Stevens, president of Foster, Stevens & Company, two nephews, Forris D. Stevens and Arthur D. Perry, also officers of the company, and a niece, Mrs. James M. Grey.



### "Nokol" Oil Burner.

From C. C. Coon, 13 East Chestnut Street, Wauseon, Ohio.

Can you tell me who makes the "Nokol" oil burner?

Ans.—Nokol Company, 215 North Michigan Avenue, Chicago.

### Steel Letters.

From R. W. Tyler, 44 White Court, Canton, Illinois.

Who makes key ring tags and stamping outfits consisting of a set of 1/16-inch steel ladders?

Ans.—C. H. Hanson Company, 178 North Clark Street, Chicago, Illinois.

### "Apollo" Lawn Mower.

From Meier Brothers, Henry, Illinois.

We should like to know who makes the "Apollo" lawn mower, as we want repairs for it.

Ans.—Whitaker Manufacturing Company, 409 South Green Street, Chicago, Illinois.

### Black and Maroon Leather Dye.

From Milton L. Kistler, Alexander City, Alabama.

Who makes maroon and black leather dye?

Ans.—E. I. Du Pont de Nemours and Company, 7 South Dearborn Street; Selz Best Manufacturing Company, 126 West Kinzie Street; Hart Leather Finish Company, 1046 West Division Street; American Shoe Polish Company, 1956 South Troy Street, all of Chicago, Illinois.

### Fine Spray Nozzles.

From N. W. Christians, Christians Sheet Metal Works, Spencer, Iowa.

I would like to know who makes a nozzle that throws fine mist for use on a sprinkling system for a vegetable display window.

Ans.—Binks Spray Equipment Company, 3124 Carroll Avenue, Chicago.

### Pin Vise.

From John Moll, Sr., General Delivery, Bismarck, North Dakota.

Who makes a scratch with compartment for phonograph needles?

Ans.—This is known as a pin vise and is made by L. S. Starrett Company, 17 North Jefferson Street, Chicago.

Repairs for "New Departure" Lawn Mower.

From N. A. Ellis, Boone, Iowa.

Where can I get repairs for the "New Departure" lawn mower?

Ans.—The Surty Manufacturing Company, 4139 West Kinzie Street, Chicago.

### Steel Stamps.

From E. R. Huston, 516 West Adams Street, Chicago.

Who makes steel stamps suitable for stamping trade marks on sheet metal products?

Ans.—C. H. Hanson Company, 178 North Clark Street, Chicago.

From Roy E. Kisling, Mt. Zion, Iowa.

Who in Chicago makes extension ladders?

Ans.—John Berg Manufacturing Company, 5001 South Wells Street; Rich Pump and Ladder Company, 1318 North Clark Street, and American Ladder Company, 2101 South Canal Street.

### Draft Gauge.

From D. A. Gibson, 4140 Flad Avenue, St. Louis, Missouri.

Can you tell me who makes the chimney testing gauge described on page 98 of your 1925 Warm Air Furnace Special?

Ans.—E. Vernon Hill Company, 64 West Randolph Street, Chicago.

### Here's a Window Glass Cleaner That You Can Use.

Window glass constantly exposed to the action of the sun and elements soon acquires a dullness which cannot be removed by washing or scrubbing. This is due to a gradual surface decomposition of the glass. Such glass can be restored to a fairly bright condition by washing with dilute hydrochloric acid and afterwards rubbing with chalk or whitening.



## Random Notes and Sketches

By Sidney Arnold

"The essence of humor is sensibility; warm, tender fellow-feeling with all forms of existence."—Carlyle.

H. R. Harrison, who travels for the Rudy Furnace Company and who is also the President of the Travelers Auxiliary to the Illinois Sheet Metal Contractors' Association, left the latter part of this week on an extended business trip through Virginia and the Carolinas.

My only regret in seeing Roy go is that he is driving through. Just what will happen to him should he suddenly develop a thirst about the time he gets into the Blue Ridge Mountains I don't know. I doubt whether he could stand much of that "cracker" fire water—and that's all they drink down there. Now if he were only traveling by rail, I shouldn't worry much, because I know that he is thoroughly acclimated to ice water. If I don't hear from him in a week or two, I will send out a searching party.

\* \* \*

I have just learned that Roswell Strong of the Homer Furnace Company, is recovering from an operation for appendicitis which he underwent at the Wade Memorial Hospital, Coldwater, Michigan. I am sincerely happy that the operation was successful and I am sure the many friends both in and out of the trade join with me in wishing Ros a speedy recovery.

\* \* \*

H. O. McElwain, Elkhart, Indiana, who represents the Lennox Furnace Company in that territory and in Michigan, as a little boy was very bashful. He disliked being kissed, but it seems that all the girls wanted to kiss him on every occasion. One day he had been kissed a lot. Then, to make matters worse, on going to the picture palace in the evening, instead of his favorite cowboy and Indian pictures there was nothing but a lot more hugging and kissing. He returned home completely out of patience with the whole tribe of women. After he had been tucked into bed, mother

came in to kiss him good-night. He refused. Mother begged and begged, till in disgust he turned to his father, who was standing at the doorway, looking on, and said, "Daddy, for heaven's sake, give this woman a kiss!" Mrs. H. O. says, "How times have changed!"

\* \* \*

### Mother

Mother you sleep with the silent,  
Away from the heat and the throng,  
Where the wind sighs thru the branches  
Like the whirl of a siren's song.

Mother your memory lingers  
In the flowers your love caressed;  
Your Bible is closed and lonely,  
For the warmth where your fingers  
pressed.



Carlotta Bonheur Stearns

Mother your chair is empty;  
Nevermore can I kneel and pray  
By your knee, in the quiet evening  
While you kiss my care away.

Mother altho you have left me  
You're here with your courage fine;  
And your teachings are my solace—  
My precepts, mother divine!

—Carlotta Bonheur Stearns.

\* \* \*

H. L. Mackenzie, Canton, Ohio, who travels for the Reeves Manufacturing Company, Dover, Ohio, has a fine sense of humor, and a perfect passion for the outdoors. One day recently he was called to jury service. The attorneys for the prosecution and defense had been allowed fifteen minutes each to argue the case. The attorney for the defense had commenced his arguments with an allusion to the old swimming-hole of his boyhood days. He told in flowery oratory of the balmy air, the singing birds, the joy

of youth, the delights of the cool water—One of the longwinded congressional speeches. Mr. Mackenzie thought the fellow was good for the afternoon. But in the midst of the enjoyment of this wonderful scene, the irate judge interrupted the speaker in a drawling voice and said: "Come out, Chauncey, and put on your clothes. Your fifteen minutes are up."

\* \* \*

We were honored on Tuesday of this week with a visit from L. C. Dupee, Advertising Manager, Tuttle & Bailey Manufacturing Company, New York, who was making the circuit of the trade. Mr. Dupee was accompanied by my good friend Bill Laffin, Chicago branch manager of Tuttle & Bailey. I did not have the pleasure of seeing these gentlemen, as I foolishly overindulged in my favorite dish of sliced raw cucumbers the previous evening, and, of course, paid the penalty.

\* \* \*

An old lady walked into the Judge's office.

"Are you the Judge of Reprobates?" she inquired.

"I am the Judge of Probate," replied his honor, with a smile.

"Well, that's it, I expect," answered the old lady. "You see," she went on confidentially, "my husband died detested and left several little infidels, and I want to be their executioner."

\* \* \*

Here's something to remember. Blair Quick, of the Quick Furnace & Supply Company, was telling me recently about a certain merchant in his home town who ran for office and was overwhelmingly defeated. He polled so few votes that he appeared ridiculous. He was in danger of being laughed at, but the merchant was a good sport. He beat the town to it. The morning after the election he put this sign in his window: "\$25 reward for the name of the man who cast that vote for me." Everybody saw it and laughed. But they laugh with him and not at him.

## The Editor's Page

### Making More Money Out of Sheet Metal Contracting

**T**HE sheet metal contractor of today is interested in learning not so much the technical side of his business, but in how to make more money out of his business. He has pretty nearly mastered the details about laying a roof or putting on a gutter or downspout.

What he wants to know now is how can he make the profit side of his ledger show greater balances.

One very effective way of doing that thing is to stop the leaks through which a great deal of the profits of the business are dissipated. Perhaps there is more money lost through loss of time or thoughtless advertising than in any other way.

In order to stop leaks one has got to think. Suppose a local advertising salesman calls on you. He wishes to sell you space on a baseball score card, a high school basketball program or some similar form of local advertising. Do you just give him an ad indiscriminately, without thinking about the possible returns you are going to derive from it, or do you picture in your mind's eye just who it is that is going to read your message on that card; do you stop to consider whether your audience is made up of home owners who are, therefore, potential customers; do you find out whether the cards are going chiefly into the hands of school children.

Determining who your readers are should be your yard stick as to the value of any given type of advertising at all times. You are not running a charity organization, and if you want to aid charity that is your affair, but don't call it advertising and then blame advertising if you fail to get results.

Another very important item to watch is the time each man spends on each job he undertakes. Your cost accounting method should be such as to give you a detailed history of each operation which each one of your men undertakes each hour of the day. It is only by keeping a close tab on your workmen and their activities that you can really make each job bear its proportionate share of the overhead and show a substantial profit when the work is completed. Here's the explanation:

You turn in your competitive bid on a certain contract. You get the job. You know, of course, approximately what your material requirements are. You have an average estimate of how long in time each phase of that work is going to take.

Your profit and overhead are added in. Now, should your estimated time for labor be too low, you cannot raise the contract price; therefore your profit suffers. Instead of making your 10, 15, 20 or 25 per cent profit, it becomes some other figure, always far less than that which you calculated the job would produce.

How can you locate the leak? Without a method of time recording, there is no way which will point out to you where your losses occur. If, on the other hand, your

foreman is furnished with a system of time recording sheets that he must fill out for each man at the conclusion of each operation on any given job or several jobs going through the shop at the same time, you have an absolute record of each man's time at the end of each day, or at any time during the day. Your own experience should then tell you whether or not the job is taking too long or whether you are not allowing enough for labor in your original bid.

Such records are invaluable not alone while the job is going through the shop, but as a matter of record for comparative purposes. You may be allowing too much for labor on any given job and for that reason are not getting many of the jobs upon which you bid. Perhaps some of your machinery has become obsolete and for that reason your men require more time to complete a given piece of work than is necessary.

Such information as that outlined is absolutely necessary to every man in business. Without it his bidding becomes a mere matter of guesswork, which at best is unsatisfactory and unfair both to the customer and to his business.

### Why Warm Air Heating Plant Is Good Investment

**W**HY is a warm air heating plant a good investment for the home owner? We have all heard a great deal about the possibilities of pyramiding personal insurance—about the creation of a paid-up policy that insures the holder a definite income in old age.

On page 32 of our May 1st issue, George Boeddener, of the Fox Furnace Company, has uncovered some very conclusive evidence that the insurance companies have not a monopoly on gilt edge investment.

The plan outlined by Mr. Boeddener can be used very effectively by warm air heating plant salesmen. What Mr. Boeddener has done is nothing less than to beat the insurance man at his own game. The facts were there all the time; it simply remained for some genius to discover them and reduce them to untechnical terms, as Mr. Boeddener has done in his article.

This article should be read and re-read by every furnace installer who is now trying to learn the secrets of salesmanship. The warm air heating system is the world's greatest money maker.

There is no longer any doubt about the warm air heating system being superior to all others for residence heating. Then why should the warm air furnace installer not take full advantage of every opportunity to market a superior product? He can and will do it and along the lined recommended by Mr. Boeddener.

The insurance now being offered by the Chicago Tribune is no cheaper than ordinary insurance when the same law of averages is applied to the latter.



# Take a Furnace With You When on That Door Knob Pulling Tour

*Jack Stowell Finds It Pays and Here's How He Works it*

By GEORGE DUERR

**F**EW of us would realize that the tactics of Mohammed on that memorable occasion in biblical history when the mountain refused to come to him would be applicable to a modern advertising scheme. However, seeing is believing and we are given good and sufficient evidence that Jack Stowell, 12-14 South La Salle Street, Aurora, Illinois, has employed Mohammed's tactics in his advertising program.

Jack Stowell, who is an excep-

tric light bulb which is attached to the battery of the car is rigged up inside of the furnace and lighted.

Mr. Stowell says: "Our signs, you will see, are the only advertising matter on the car. These signs carry the same wording as that used on a blotter which we mail out to our trade. These blotters and signs have a white background, the name "Jack Stowell" is in red and the rest of the wording is in black.

"Our primary object in rigging

when it is standing against the curb. We do not hesitate to say that it is the best advertising we have put through to date. It is worth every cent of the cost of rigging the affair up."

Jack Stowell is a comer. A short character analysis will show why he is a comer. In the first place he is a thinker. He has the faculty of quickly locating himself in relation to his surroundings. He has ideals of what a sheet metal business ought to be ten, fifteen, twenty-five years from now. He has the ability, the inclination and the initiative to seek out the whys and wherefores of the problems which daily confront him. He has the ability to make up his mind and to act. He has the determination to stick by his decisions, once made, until the project is carried out to its logical conclusion. He throws his whole self into whatever he is doing and gives it the best he has at all times—whether it is business, golf, skating, wrestling or association work, and he has captured first honors in them all.

Jack is twenty-nine years old. He has been in the sheet metal and warm air furnace installation business all told about six years. Four and one half years ago he established a business of his own. He started out in a basement, with \$75 cash and a strong conviction that he could install furnaces better than anyone else; that he could lay a sheet metal roof better than anyone else.

He did not drift into the sheet metal contracting and warm air furnace installation business; nor did he take up where some kind parent had left off. He chose the sheet metal business because he thought it held out greater opportunities and greater possibilities for the exercise



Showing How Jack Stowell Takes His Furnaces to His Prospective Customers' Door

tionally brilliant warm air furnace installer and business man, got to thinking one day that customers were not coming into his store to see his furnaces fast enough to suit him and it was, therefore, up to him to take the furnace to the customer. Here's how he did it.

The accompanying illustration tells the story. The body of the Ford truck is black. The wheels have been painted a bright red. The furnace shown is covered with a bright white enamel, while the front is decorated in an attractive cream color. The inside of the furnace is painted a bright red and a small elec-

up this furnace on the car as shown was for sales purposes. We find that a good artist and a good writer can make a furnace look just as good as another on paper. Eighty per cent of our heating plants are sold without being able to get the prospects to our office. So we conceived the idea of taking the furnace up to them. We have only had it going a short time and weather being very unsatisfactory, has handicapped us somewhat, but it is very apparent to us that the stunt is going to be a knockout from the sales standpoint.

"We also find that the car attracts much attention and more advertising



of his talent than any other industry. He entered the sheet metal contracting business after a thorough analysis of the prospects that that business had to offer and after knocking about in other professions since the age of thirteen, when he was compelled to leave school and make his own way in the world.

Jack loves his work. A 10-minute conversation with him will thoroughly establish this fact. He fairly radiates enthusiasm about it. His attitude toward his work and his logic are all that they should be for the greatest possible success. He believes that the appearance of prosperity is very closely associated with prosperity itself. This belief is expressed in the last detail. He always wears clean, neatly pressed clothes. His shop is on one of the busiest thoroughfares in the city of Aurora. It is a well lighted, clean airy structure, which is completely renovated and painted inside and out once a year. This item he charges to advertising.

The business methods employed by Jack are efficient in every respect. He is himself thoroughly versed in every phase of the work that comes through his shop—which is remarkable in view of the fact that he has only been in the business a little over six years. He employs a budget system for his expense accounts, which aids him in checking each item of expense from month to month. This policy aids him greatly in stopping the leaks that are always bound to occur.

Another remarkable thing about Jack is that he employs only the highest type of workmen. Although he himself has nothing against the unions, he operates an open shop. He has a very competent foreman, who, like all of the workmen, takes a very keen interest in the work.

Jack is also somewhat of a philosopher; that is, in the modern or practical sense of the word. He is also a psychologist, although if told so he would undoubtedly deny that fact. He classifies all possible customers of his business into three distinct groups—the low, the medium and the high-class groups. He

then decides which class of business he wishes to have his shop cater to and makes his bid for that business accordingly. From the very first he has made his bid for the high-class trade. People in this class, he rea-

as competition. He is patterning his business after the great high-class merchandising emporiums in the country and during his four and one-half years of experience along this line nothing has occurred to

### "Standard Code" Estimate JACK STOWELL HEATING SYSTEM

For \_\_\_\_\_  
At \_\_\_\_\_  
Bill to \_\_\_\_\_  
Style Bldg. \_\_\_\_\_ Built of \_\_\_\_\_  
Figured by \_\_\_\_\_ Checked by \_\_\_\_\_

Bid No. \_\_\_\_\_  
Date \_\_\_\_\_  
Contract No. \_\_\_\_\_  
Date \_\_\_\_\_  
Order No. \_\_\_\_\_

#### Explanatory Notes.

Note 4. In obtaining glass surface use full amount opening. An outside door is figured as glass.  
Note 5. To obtain net outside wall multiply height by width and deduct the glass in all windows and outside doors.  
Note 6. For rooms having unusual exposure, ordinarily north, northeast and northwest, add 15% to pipe area. For east and west exposure, add 10%.  
Note 7. For cold ceilings, add one half net area of ceiling to net exposed wall (cold ceilings are those next to unheated attic).  
Note 8. Use no warm air pipe less than 6 inches in diameter.

Note 10. These formulas are for 70° inside temperature with any temperature outside. For a temperature of 10° below zero add 10% to the capacity of each pipe.  
Note 11. The value of 800 (used in cubic contents) is for an estimated air change of one room volume per hour. If it is desired to provide for 1 1/2 room volume use the figure 900. If for 2 room volume use the figure 600.  
Wall stack areas to be as follows:  
1st floor—Same as basement pipe area.  
2nd floor—70% of basement pipe area.  
3rd floor—50% of basement pipe area.  
Registers to have same area as basement pipe.

FIRST FLOOR		Net	Face	Results	Size Leader	Leader Area	Flueing Space
<b>1. LIVING ROOM</b>							
Glass	Length X Width X Height	Exposure		+ 12			
Exp. Wall	Less Glass			+ 60			
Co. Contents				+ 800			
Size Wall Pipe	Area				x9		
Size Register	Area						
		Plus % for Exposure					
		Size Leader required use next size larger.					
<b>2. DINING ROOM</b>							
Glass	Length X Width X Height	Exposure		+ 12			
Exp. Wall	Less Glass			+ 60			
Co. Contents				+ 800			
Size Wall Pipe	Area				x9		
Size Register	Area						
		Plus % for Exposure					
		Size Leader required use next size larger.					
<b>3. KITCHEN</b>							
Glass	Length X Width X Height	Exposure		+ 12			
Exp. Wall	Less Glass			+ 60			
Co. Contents				+ 800			
Size Wall Pipe	Area				x9		
Size Register	Area						
		Plus % for Exposure					
		Size Leader required use next size larger.					
<b>4. HALL</b>							
Glass	Length X Width X Height	Exposure		+ 12			
Exp. Wall	Less Glass			+ 60			
Co. Contents				+ 800			
Size Wall Pipe	Area				x9		
Size Register	Area						
		Plus % for Exposure					
		Size Leader required use next size larger.					
<b>5. BATH</b>							
Glass	Length X Width X Height	Exposure		+ 12			
Exp. Wall	Less Glass			+ 60			
Co. Contents				+ 800			
Size Wall Pipe	Area				x9		
Size Register	Area						
		Plus % for Exposure					
		Size Leader required use next size larger.					
<b>6. CLO.</b>							
Glass	Length X Width X Height	Exposure		+ 12			
Exp. Wall	Less Glass			+ 60			
Co. Contents				+ 800			
Size Wall Pipe	Area				x9		
Size Register	Area						
		Plus % for Exposure					
		Size Leader required use next size larger.					
Total Area of Leader Pipe for First Floor							

National Association Code Estimate Blank Used by Jack Stowell. The Second and Third Floor Specification Are on the Reverse Side of Each Sheet

sons and quite correctly, are more discerning; it requires less work to convince them of the distinction between quality service and work that is based entirely upon price; these people demand quality service and are capable and willing to pay for it. Jack feels that there is no such thing

lessen his belief that he is on the right track toward success.

Jack has warm air furnace installations in some of the finest homes in the city of Aurora. He has done the sheet metal work on most of the finest buildings in the city. Notable examples among these are the new

Old Second National Bank building, a model of architectural perfection, the new department store of Sensenbaughs, long considered the leading dry goods store in the city. The

alert to grasp opportunities to keep his business before the public. He never gives his customers a chance to forget him. He calls on them often and when he does he is court-

Jack is proud of every piece of work he does. He takes infinite pains with every bit of it and always finds a way to impress upon his customers the value of quality work.

It was stated above that Jack is a firm believer in advertising. He does not advertise indiscriminately however. A little incident will show his discernment in regard to it. An advertising solicitor called on Jack. He had baseball score card space for sale. He earnestly solicited Jack with all the fervor that anyone could employ. Jack listened patiently until the salesman had finished his story and then courteously but decisively told him that he had all the space he wanted just then. After the salesman had departed Jack turned to me and said that as much as he believed in advertising, he could not see where space on a baseball score card could possibly benefit the sheet metal business. His experience in attendance at baseball games of the nature in question told him that the possibility of his name coming before a potential buyer of his services through that avenue was extremely limited. He argued that

HEATING

SHEET METAL

# LET JACK STOWELL MAKE IT HOT FOR YOU

PHONE 2864

14 SO. LA SALLE STREET

Blotter Advertising Which Jack Uses. The Name Is in Red. The Design Is Distinctive and Is Carried Out in All His Advertising

entire ventilating system of this building was installed by Jack and he has the contract for servicing of this system throughout the year.

The city of Aurora has a population of around forty-one thousand. It is safe to say that most of those forty-one thousand people are well enough acquainted with Jack to give him a friendly nod. He is well liked because he so conducts his business as to command respect. An instance will illustrate what is meant. When Jack started out, he put in a warm air heating plant, against his better judgment, which he knew would not give entire satisfaction. Complaints arose in the course of time. Realizing the detrimental influence this unsatisfied customer and his wife could become to him in the community out of which he hoped to make his pile, Jack went out and replaced the job at a cost to himself of \$200 at a time when he didn't even have the \$200. But the investment in experience has brought in ample returns since then, as the owner was thoroughly satisfied with the rearrangement and has only words of praise for Jack and his business methods.

Jack is a firm believer in advertising of the right kind. He believes in advertising his own business rather than some manufacturer's product. He is constantly on the

easy itself. He always has a pleasant word for the children.

On each furnace that Jack installs—of course, to his customers he installs heating plants, never furnaces—he places a neat, attractive name plate, which attests the fact that Jack Stowell put the plant in. He has a characteristic form of advertising which he carries out on all of

HEATING
SHEET METAL

## LET JACK STOWELL MAKE IT HOT FOR YOU

PHONE 2864
14 SO. LA SALLE STREET

Jack Couldn't Get Just What He Wanted in Type Shown in This Blotter, So He Designed the One Shown Above

his publicity work. The blotter shown herewith gives the idea. Stickers of the same type are placed conspicuously on the warm air ducts in the basement of each job he puts in. Hence when the owner shows the plant to his neighbor or his friend, the name of the installer is also supplied. Of course, it is not inferred that he clutters up each basement with his advertising.

if he were a dry goods merchant, selling fancy sweaters, a candy merchant or a cigarette vender, that type of advertising would be his specialty. Therein he demonstrated his ability to think and act quickly and accurately.

On the other hand Jack is absolutely sold on the house-to-house canvass method of selling warm air heating plants. He is the type of

man who is constantly experimenting and working out methods of doing business that will fit his particular case. His mind is constantly active. When business gets slack, he never takes off his collar and tie, in order to go to work in the shop. He reasons that in the shop he could possibly earn \$10 per day. On the other hand if he remains in his office doing nothing but thinking for a month, he may evolve one single idea that will net him thousands of dollars in added business. That's Jack's logic and it is pretty sound at that.

How does he get business? He goes out after it. He is never in his office for more than a few short moments at a time. He has a small good-looking car in which he keeps constantly on the move about the city, inspecting work in progress and looking up new work, calling on old customers and the like. For instance, we were driving up an avenue, going the maximum speed which the law allows. We came to a new building. The brakes squeaked and we came to an abrupt stop. Jack jotted down the number of the building and the nature of the work being done. Then drove on.

To spend a day with Jack Stowell is indeed a revelation. It was stated earlier in the article that he was a comer. He is all of that and more. He is one of the factors in the industry that is lifting the industry to a higher plane. He says, however, that the industry will never take its rightful place as a whole until the individual contractor changes his attitude and his ideals concerning the industry.

Jack is absolutely sold on association work. He was the first sheet metal contractor and warm air furnace installer to have his name recorded as an associate member in the National Warm Air Heating and Ventilating Association. He believes in the Standard Furnace Code, but he also believes that a great deal of educational work must be done by the association among the installers before the plan can work out with the greatest efficiency.

### Problem in Draft Puzzles Alfred L. Jordan, Lynchburg, Va.

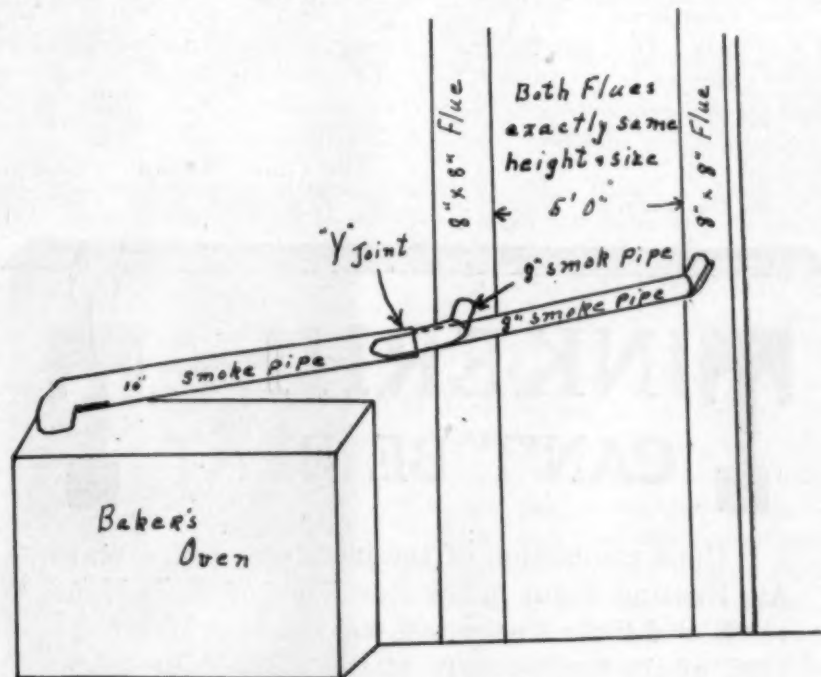
Alfred L. Jordan, of W. B. Jordan & Son, Lynchburg, Virginia, has a problem in warm air heating which is puzzling him.

The accompanying sketch is self explanatory. An 8x8 inch flue by itself is not big enough to pull the fire in the baker's oven because that size flue will not take care of a ten-inch smoke pipe. It happens that

another flue of the same size and height is in the kitchen.

Now, will this arrangement draw satisfactorily? Or will one flue draw from the other flue, thereby not having any effect on the fire? This baker uses bituminous coal. Will it "tag up" in a short period of time with this arrangement?

We would like to have your opinion and the experiences of others through your trade journal, if you will.



Illustrating the Problem Presented by Alfred L. Jordan

### Monitor Furnace Out with Its New Merrimac Guaranteed Steel Furnace

The Monitor Furnace Company, Cincinnati, Ohio, have recently completed work on their new Merrimac guaranteed steel furnace. A short description of the furnace is herewith provided.

All seams, in addition to being held by cold driven rivets, placed  $1\frac{1}{4}$  inches from center to center, are caulked and electrically welded.

The firepot is cast iron of average fire brick thickness. A circulating air space between the firepot and combustion chamber supplies fresh air around the fire, thereby acting as a hot blast and causing the fire to burn towards the center.

The combustion chamber is made

of 8-gauge copper-bearing steel, and is corrugated at the top. This construction equalizes the expansion and contraction.

The radiator has a baffle plate which retards the travel of the smoke sufficiently to obtain the maximum heat return. Radiator is made for either direct or indirect draft, according to the condition of the flue to which it is connected. All joints are packed with asbestos, making them absolutely smoke- and gas-tight.

The grates used in the Merrimac Furnace are of the Monitor Rocker Type, equipped with outside, waist-high shaker handle.

Water pan is placed in a swinging door at the top of the front.



The furnace is equipped with the Caloric smoke consumer.

The feed door is 14 $\frac{3}{8}$ x15 $\frac{1}{2}$  inches.

The Merrimac has been constructed so as to permit the easy installation of an oil burner should such be desired.

## Using Actual Performance Record as an Aid to Further Sales

### *Tinker Employs Newspapers to Aid Him in Carrying Demonstration Into Prospects' Homes*

**P**ERFORMANCE records are a most valuable aid to the conduct of a business. They give the prospective customer an opportunity to check up on the statements and performances of the advertiser should he desire to do so.

So far the warm air furnace in-

staller has not been able to do a great deal of performance advertising, because he has had no definite and convincing records to present to the prospective home owner in his advertisements.

The Liberty Specialty Company,  
527 East Main Road, Conneaut,

Ohio, has evolved an effective method of presenting definite performance and operating records to his prospective customer. The method is shown in the accompanying illustration.

In order to more effectively sell his customer, as well as himself, A. C. Tinker, manager of the Liberty Specialty Company, decided to make some temperature tests that would give him a basis from which to start in selling warm air heating plants.

Therefore when he had completed the installation of the plant mentioned, he took temperature readings as outlined. These actual temperatures obtained he used in a newspaper advertisement. Later copies of the ad could be mailed out with a circular letter to a selected list of prospective customers calling attention to the performance record.

In this way Mr. Tinker is able not only to present a cross-section of a performance record of the heating plant which he sells, but he is able to do this over the signature of the owner of the house in which the furnace was installed, which is indeed an advantage.

The record as shown gives an average temperature in the kitchen of 69.6 degrees; dining room, 72 degrees; front room, 67.6 degrees; reception hall, 68 degrees.

It would have added a great deal to have included in the ad a reference to the Standard Furnace Code or its use.

Advertising of this character, when properly done, cannot fail to produce results favorable to the dealer. The warm air heating plant is unquestionably the best method of heating the home. It remains for the industry to acquaint the home owner of that fact. Demonstrating actual performance is the most effective way to do that and the method employed by Mr. Tinker is the next thing to the demonstration.

There is very little that can circumvent the facts gleaned from actual performance. They stand as the rock of Gibraltar. More furnace men should employ this means.

# TINKERHEAT CAN'T BE BEAT

Upon completion of the installation of a Warm Air Heating Plant in the Residence of A. L. Hahn, 154 Nickel Plate Ave., a test was made on March 4th, 1926, of the temperature at the Ceiling, Breathing Line and Floor, in four rooms on the first floor, taking 10 minutes reading of the thermometers in each instance.

	Kitchen	Dining Room	Front Room	Reception Hall
Ceiling	73°	75°	70°	71°
Breathing Line	70°	71°	69°	69°
Floor	66°	70°	64°	64°

These tests were made with Mr. A. L. Hahn, and Mr. Arthur E. Towne present. This shows the way modern Warm Air installations function today in comparison with the old Hot Air Plants.

Telephone 1143-Main

Warm Air Heating and Ventilating Specialists

Performance Record Advertisement Used by Liberty Specialty Company,  
Conneaut, Ohio

# American Hardware Manufacturers and Southern Jobbers Meet at Atlanta, Georgia

*Business Conditions Look Favorable — Jobber and Dealer Merchandise Stocks Only Moderate*

**M**ORE than 500 hardware men from all sections of the country were in Atlanta Tuesday for the joint opening meeting of the Southern Hardware Jobbers' Association and the American Hardware Manufacturers' Association Tuesday evening at 8:30 o'clock in the ballroom of the Atlanta Biltmore hotel.

Mark Lyons, of Mobile, President of the southern organization, called the session to order and presided during the evening, introducing Mayor Sims, who delivered the address of welcome; President S. Horace Disston, of the American Hardware Manufacturers Association, and a number of other speakers, discussed conditions in the hardware industry.

One of the chief features of the business session Tuesday evening was the report of the development and progress of the hardware council, which was organized a year ago and is represented by prominent hardware men of the United States.

The purpose of the joint meeting is to bring together the "makers and users" of hardware and supplies, that they may exchange ideas and discuss problems of the trade, in an effort to bring each other closer together in coöperation and interest in their business.

Business conditions in the hardware industry were reviewed by W. D. Biggers. Mr. Biggers said in part:

"Practically all business leaders look favorably on present conditions and a continuation of good business.

"Jobbers and dealers are carrying moderate stocks of merchandise, and principally goods that are always in demand. Very few merchants have any surplus stock on hand. This enables the merchant to turn his stock more frequently and to use his investment to better advantage. The unseasonable spring weather of the

past six or eight weeks has had the effect of somewhat of lessening the seasonable demand. These conditions, however, have not been so unusual as to actually curtail demand, but rather means a later business than usual on seasonal goods.

"The general business conditions throughout the country are favorable, and fundamentally conditions are sound. It is true that we have had some unpleasant experiences in Wall Street in the speculative ele-



**Mark Lyons**  
President Southern Hardware  
Jobbers

ment. The country needs more workers and less speculators, and the experience of the past few weeks should have a beneficial and sobering effect upon hundreds of business men. Just as an example to show that the actual business conditions of a firm have nothing whatever to do with the speculation in their stock: Dodge Brothers, the manufacturers of the Dodge motor car and the Graham trucks during the first quarter of 1926 shows a sale of 70,599 units as compared with 51,318 units in 1925. This is a gain of 37 per cent in sales, and yet during that same period their stock on

the Wall Street market dropped from \$44.00 to \$28.00 per share.

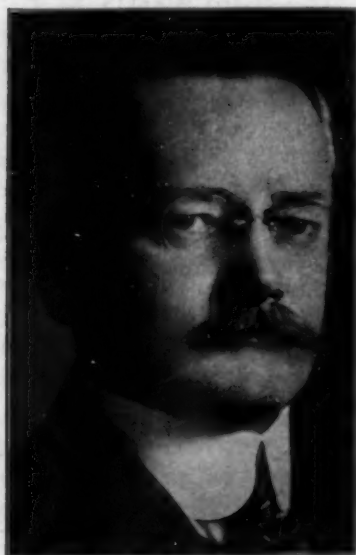
"Many of our large industries are working at peak production, for instance in the Detroit district the employment of the past week showed 251,578 workers as compared with 232,068 the same week of last year, and yet the last week showed a decline in workers of 7,708 as compared with the previous week. This change of labor does not mean that these men are out of employment, because when our factories let up in their peak operations the farms and railroads and other outdoor modes of work take up the men who have formerly been employed in-doors in the factories.

"We are coming to a season of the year when there will naturally be changes in various industries which have been working at peak production, and this is particularly true of those industries who have seasonal lines of goods. These are all matters that have an influence on general business and simply indicate conditions as they exist at this time. Modern distribution shows the best and most satisfactory results from concentration of effort on a reduced number of lines. Standardization is being carefully studied, and increased sales can be had both by the manufacturer, jobber and dealer by eliminating sizes, kinds and finishes in various lines of merchandise that are not necessary.

"We can do a very much larger and better volume of business on standardized and concentrated lines than on a great variety of duplicated lines. Many lines of merchandise should be studied as to the changes that are taking place. Old items of merchandise should be discarded for newer and better items that will serve the same purpose either at a less price, or items that can be more economically handled.



"In 1905 the first Norton grinding machine was sold to the automobile industry, and that was when they were using horses and carriages on Fifth Avenue. Today Fifth Avenue and 'Main Street' is congested with automobile traffic. This change has necessitated a conference of manufacturers, distributors and users with the coöperation of the Division of Simplified Practice of the Department of Commerce, and these three working in conjunction have effected a reduction of the va-



**F. D. Mitchell**  
Secretary-Treasurer, American  
Hardware Manufacturers

rieties of grinding wheels from 750,200 varieties to 255,300, and this simplified list of sizes is such as to make possible a saving to the industry of five million dollars a year.

"Building construction is well under way, and while there is a declining tendency as compared with the peak of the previous year, yet there is a tremendous amount of building going on in all parts of the country, and individual territories should be watched closely for the benefits to be gained through the large volume in this industry.

"Freight carloading shows conclusively that there is a large volume of business being moved week by week, and as this business is all practically spot business very little of it is in the realm of speculative business; it should indicate that there is

a good and healthy movement of all classes of merchandise.

"Agricultural production, which always has to be reckoned with when studying general conditions, has been adjusted to such an extent that the farming industry as a whole is now in the best general position that it has been since 1920, and during the past year agriculture as a whole has made further progress towards normal stability. Farmers have paid off a substantial amount of indebtedness, and an increased sale of fertilizers, machinery and building materials indicates that the farm has been more productive. Farmers by experience of former years have learned that it is necessary to diversify not only their crops but their method of farming, and while it is too early to predict what 1926 will have in the way of crops yet the weather conditions of the last few weeks, which have looked unseasonable to some of us who desired quick turns of our merchandise, may find that this has been in a general way of great benefit to the farmer and fruit grower, which in the end will bring greater prosperity to all lines of business, for after all, manufacturer, jobber or retailer cannot hope to prosper unless the farms show a bountiful yield.

"Changes in business should be carefully watched and carefully considered. I quote a paragraph from the 'Nation's Business' on this subject:

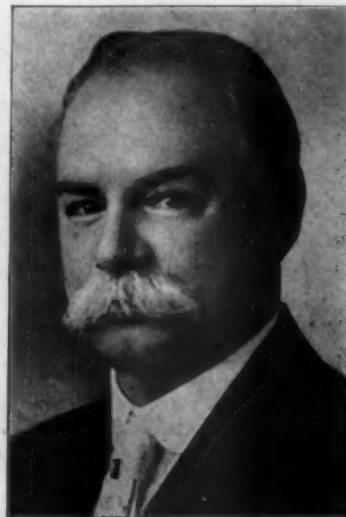
"Viewing the entire situation with as much detachment as is humanly possible, it may be said that while a record business for the time of the year was probably done, the margin of profit was small, first, because of the intense competition developed and second, because of changes in channels through which a great deal of the business flowed."

"This refers to the business being done through the department stores, chain stores and mail order houses. All of these things have to be taken into consideration; their methods studied so as to see wherein they conflict and what can be done to meet that class of competition.

"To show changes in industry, in 1887 in West Street, New York, there was a line of telegraph poles carrying 25 cross arms with 250 wires. Today these wires are all underground and the Bell system has \$524,000,000 invested in underground conduits and cables that contain thirty million miles of wire.

"On the subject of general prosperity I want to say that the American worker is drunk with prosperity, not drunk from 'booze.' The worker and his family have more time, more opportunity and greater means to enjoy the comforts and pleasures of life than they have ever had in the past or than they have in any other country.

"A country editor was once criticised for what he published and he retorted by saying, 'You ought to see what I did not publish.' I feel much like this country editor—to cover in ten or fifteen minutes what the business conditions are is such a difficult matter that what I am leav-



**John Donnan**  
Secretary-Treasurer Southern  
Hardware Jobbers

ing unsaid is the most important part of my talk."

#### Council Reports.

The hardware council, which was originated as a body to consider the big problems in hardware manufacturing and selling, will make its first report during the sessions this week.

The council is composed of representatives of the National Hardware Association, South Hardware and



Jobbers' Association, National Retail Hardware and the American Hardware Manufacturers' Associations. Members of these associations from time to time are mailed the conclusions reached by the council on the business problems and conditions which they study.

It meets twice a year and studies such problems as: Investigation of installment selling, chain stores and distribution costs, service not demanded by consumers, distressed merchandising, selling helps, over-production and over-selling, business management, future of the small store, improved authentic texts, distribution margin, tax legislation, price maintenance and other problems.

The first business sessions were held Wednesday morning when the two associations met first in separate session and later in the day in joint session.

At the joint sessions the delegates heard addresses on "Do We Increase Our Business or Our Profits by Making Cut Prices?" and "Will

Intelligent Service and Quality Goods Retain Customers?" Speakers will include J. P. McKinney, Jr., of Pittsburgh, Pa.; J. W. Tabor of Waco, Texas, and A. E. Alverson, of Rockford, Illinois.

Thursday's session began at 11:30 o'clock with addresses on the possibilities of the southern automotive market, and the manufacturer's responsibilities to the jobber and retailer. Speakers included T. W. McAllister, R. L. Bidez, of Mobile, and Houston Dudley, of Nashville. Frank L. Campbell and John M. Williams presided.

The officers elected for the Southern Hardware Jobbers are as follows: President, Mark Lyons; First Vice-President, L. M. Stratton; Second Vice-President, John L. Keith. Executive Committee, C. H. Ireland, B. Morrison, R. J. Ogillbie, T. R. Frazer. The next meeting place will be Memphis.

Resolutions of thanks were passed to the local entertainment committee, the local papers and the hotels.

The election of officers resulted as follows:

President: F. Herbert Smith, Providence, Rhode Island.

First Vice-President: H. A. Dean, Rome, Georgia.



R. P. Boyd, Secretary

Second Vice-President: George H. Hillman, Nashville, Tennessee.

Secretary: R. P. Boyd, Knoxville, Tennessee.

Executive Committee: William A. Corry, Covington, Kentucky; E. J. Newey, New York City; Thomas E. Parnell, Chattanooga, Tennessee; James T. Powell, New Britain, Connecticut; George E. Eddy, Baltimore, Maryland, and F. Guildener, Caronsville, Maryland.

#### **William Thomson, Pioneer Stove Maker, Dies at Philadelphia**

William Thomson, who was one of the pioneers of the stove industry, died at his home in Philadelphia recently, according to J. B. Borden, Vice President Borden Stove Company. He was 86 years of age. Mr. Thomson was formerly in the stove business at 64 North Second Street, Philadelphia.

He is survived by his daughter, Mrs. Robert S. Riggs, and two sons, Jesse O. and Fred W. Thomson. He was a Civil War veteran, connected with the George G. Meade

## **Old Guard Southern Hardware Salesmen Have Good Time at Atlanta**

### **Mourn Loss of Some of Its Members Since Meeting Year Ago**

THE Old Guard Southern Hardware Salesmen's Association met in convention at the Atlanta Biltmore Hotel this week during the joint meeting of the Southern Hardware Jobbers and the American Hardware Manufacturers' Association.

The Old Guard Southern Salesmen's Association was formed for the purpose of promoting good fellowship and higher ideals in the hardware industry. Its membership is limited to 100 salesmen. This number is maintained at all times. At the death of a member, a new member is elected from the application for membership list.

The organization is composed of a fine body of men who are intensely interested in the welfare of the industry and its members. The con-

ventions are always full of pep and visiting is the order of the day when these good fellows get together. The purpose of organization is not altogether social, however. A fund of money is kept on hand at all times for the purpose of assisting the widow of any member with the expenses incident to the death and burial of her husband. At the death of any member the secretary immediately draws a check for \$250 and mails it to the widow or next of kin of the deceased.

The organization has served a real purpose in the ranks of the hardware industry and it is most highly thought of in the entire trade. Its members are men of character, men of ideals and responsibility who are ever on the lookout for the best interests of the industry.

Post, a member of St. Albans Commandery, a Lu Lu Shriner and a

member of the Friendly Sons of St. Patrick.

## Hardware Manufacturers' Duty to Jobber and Retailer in Surplus Stock Distribution

*Has Also a Responsibility With Reference to the Imperfect Merchandise*

By HOUSTON DUDLEY, Vice-President, Gray & Dudley Company

THE manufacturer's responsibility to the jobber and retailer in the distribution of surplus stocks and imperfect merchandise is a responsibility that should be assumed and not side-stepped.

The manufacturer should cooperate with the jobber and retailer in the distribution of both surplus stocks and imperfect merchandise of his manufacture. We use the word "cooperate" advisedly, for it is a question of cooperation. The manufacturer should not be held responsible for the surplus stock of the jobber or retailer. On the other hand, the manufacturer should, in every reasonable way possible, assist both the jobber and the retailer to dispose of their surplus stock without a loss to them and at a profit if possible.

There are many ways in which the manufacturer can lend his cooperation to that end. In some instances, surplus stock may be on account of the wrong sizes or style for that particular territory, in which case the manufacturer can and should help the jobber or retailer sell these sizes in some other market where there is a demand for them.

The best asset of a manufacturer is a satisfied customer.

A manufacturer, however, should not make broad guarantees or statements that would not be practical for him to live up to and that would lay himself liable to be imposed upon by either the jobber or the retailer. My experience has been that

the manufacturer who cooperates with the jobber on a reasonable basis is the most successful, loses less customers by misunderstandings and keeps his line in with that particular dealer.

By cooperation I mean to say in the event the jobber or dealer has some surplus stock, the jobber or dealer should know he has the privilege of, in fact should not hesitate to call on the manufacturer to help him dispose of it. That particular jobber or dealer should not ship the merchandise back to the manufacturer without the manufacturer's consent, requesting a credit memorandum. No, that we would consider it altogether unreasonable and out of order. In fact, we are opposed to manufacturers rendering credit memorandums. We favor replacements rather than credit memorandums. If, therefore, a manufacturer should arrange to take the surplus stock off the hands of any one of his customers, he should, of course, ship other sizes or other merchandise in the place of same and the transportation charges should be at the expense of the dealer.

Styles or pattern sometimes change, like ladies' hats, in certain sections and it happens that a jobber will occasionally find himself overstocked on some particular style or line of merchandise that has quit selling on account of some new pattern having been introduced in his territory. In that event the manufacturer from whom he bought the merchandise should, if practical, take up the old style and ship the new, the jobber paying transporta-

tion charges, assuming of course that the manufacturer can sell the old style merchandise in some other territory. We consider this a good opportunity for that manufacturer to give a little demonstration on his part of his desire to cooperate with the jobber.

Now as to imperfect merchandise, it goes without argument that a manufacturer should replace any imperfect merchandise of his manufacture, in the hands of either the jobber or the retailer, provided and assuming of course that the imperfection means a defect in the manufacture of the article. There should be no argument about furnishing a perfect piece of merchandise for an imperfect piece, assuming of course the imperfection is the fault of the manufacturer.

There is, however, a possibility—I might say probability—of the manufacturer being imposed upon unless he protects himself to the extent of making it very clear just what kind of guarantee he really gives on the merchandise he manufactures.

Those of us engaged in the manufacture of stoves and ranges take the position that all cook stoves and ranges cook. Some of them cook a meal a little quicker than others, some of them use a little less fuel than others, but they all cook; therefore, none of the stove manufacturers ever allow a jobber or retailer to return a cook stove or range on account of the fact same not cooking satisfactorily. We know that they do cook satisfactorily when they are correctly put together and connected up to a flue or chimney that is properly constructed. Here again I wish to state that we do not believe in sending credit memorandums in the event a stove or any other article is returned to the manufacturer. We suggest a replacement with a new one or repair the old one and return it to the dealer "no charge" instead of sending a credit memorandum.

I suggest the manufacturers of other lines adopt the plan that we stove manufacturers have adopted with reference to so-called imper-

\*Address by Houston Dudley before delegates of American Hardware Manufacturers' Association in convention at Atlanta, Georgia, May 4 to 7, 1926.



fect or unsatisfactory merchandise. The stove association has had printed under the name and address of the association a circular explaining in detail the usual reasons why a stove does not seemingly operate satisfactorily. They furnish illustrations in this circular of stoves connected up to a chimney that will not at any time ever operate satisfactorily on account of the construction of the chimney. In fact, this circular deals with almost every complaint imaginable with reference to a cook stove or range not operating satisfactorily and explains why and how the trouble can be corrected by the party using the stove by following the instructions set out in this circular as to the setting up, flue construction, etc.

Now the important statement in this circular is that all stoves and ranges manufactured by all of the manufacturers do cook and cook satisfactorily when they are correctly set up and connected up to a flue that is properly constructed. We stove manufacturers therefore use these circulars when answering complaints, and in as much as the circular was gotten up by the association, it is accepted as authority on the subject and it is not therefore necessary for the manufacturer using this circular to state in plain English to these customers that it is not the manufacturer's fault, for the circular will give that information.

We suggest therefore a statement, or circular of this kind be gotten up by other manufacturers in other lines, explaining how and why their merchandise can be used satisfactorily and explaining, of course, how it can be abused.

Those of our members manufacturing pocket knives do not, of course, guarantee pocket knives to make a good screw driver or can opener. In fact, manufacturers of good can openers do not guarantee can opener to make a good screw driver. Furthermore, manufacturers of good screw drivers do not guarantee same to be good cold chisel, etc.

In other words, gentlemen, we

manufacturers should deal with the jobbers on a liberal cooperative plan. We should not, however, replace our pocket knives when they have been used as screw drivers or our

axes when they have been used as rock hammers, remembering always that our best asset is a satisfied customer. Use judgment in the replacement of goods.

## Synopsis of Program for Annual Hardware Congress

To Be Held in Indianapolis,  
Indiana June 21 to 24

**D**IVISIONAL themes: Some Current Trends; Problems of the Day; Forcing Sales to Increase Volume; The Problem of Service; Merchandising Team-work; Business Policies; Diligence in Business.

One full session of three hours will be given to the study of each of these divisional themes. It will be introduced by a man who can speak with authority on the subject in an address of thirty to forty-five minutes. The remaining period will be devoted wholly to open form discussion by the convention of all the component factors involved in the session's theme.

"Some Current Trends."—The studies under this title will consider the economic and kindred changes of the past dozen years; the dominance of style, pleasure, vanity and appetite appeals as compared with interest in service goods; the evolution and results of high pressure selling methods; hand-to-mouth buying and its causes; psychological effect of general conditions and the modern buying impulses which have been stimulated.

"Problems of the Day."—This discussion will naturally cover such factors as catalog house, chain store and canvassing competition; the so-called underground selling by manufacturers and wholesalers which is so detrimental to the retail trade; the general effect of special price concessions to large buyers; the disposal of "seconds," "close-outs" and "over-stocks" through other than regular channels; jobber competition and the generally current desire to "buy at wholesale"; the trend of current demand for "quality" goods; high merchandise costs and low

margins; essential and non-essential service; quantity buying as a possible solution of the competitive problem.

"Forcing Sales to Increase Volume."—The general effect of the tendency of manufacturers and wholesalers to seek outlets through a multiplicity of channels.

"The Problem of Service."—What factors constitute service in the mind of the modern buyer? How does such buyer measure the value of service?

"Merchandising Team-work."—Hardware distribution as a joint enterprise of manufacturer, wholesaler and retailer; the importance of co-operation among hardware merchants; need of team-work by all local merchants that the community's merchandising service may be maintained at high standard, since the individual is dependent on the group.

"Business Policies."—An outlining of policies, methods and program by which hardware retailers can best solve the problems incurred by their craft and enhance the importance of their position as community purchasing agents.

"Diligence in Business."—A summing up of the convention discussions, with suggestions of future possibilities and necessities, and an inspirational urge to intelligent and energetic action in the performance of the retailing function.

—  
We would like to have you send us news items on current happenings in the hardware industry. Send in your local hardware ads. We can use some good stove news as well.





Southeastern Retail Hardware and Implement Association, (composed of Alabama, Florida, Georgia and Tennessee) Convention and Exhibition, Atlanta, Georgia, May 10, 11 and 12, 1926. Walter Harlan, Secretary, 701 Grand Theatre Building, Atlanta.

Panhandle Hardware and Implement Association, Amarillo Hotel, Amarillo, May 10, 11, and 12, 1926. C. L. Thompson, Secretary-Treasurer, Canyon.

National Association of Stove Manufacturers, Astor Hotel, New York City, May 12 and 13, 1926. Allen W. Williams, Secretary, 52 West Gay Street, Columbus, Ohio.

Metal Branch of National Hardware Association, Gibson Hotel, Cincinnati, Ohio, May 13 and 14, 1926. W. H. Donlevy, Chairman, 1014 Cherry Street, Philadelphia, Pennsylvania.

Arkansas Retail Hardware Association, Little Rock, Arkansas, May, 1926. L. P. Biggs, Secretary, 815 Southern Trust Building, Little Rock.

Western Warm Air Furnace and Supply Association mid-year meeting, Sherman House, Chicago, May 21 and 22. Secretary John H. Hussie, 2407 Cumming Street, Omaha, Nebraska.

Kentucky Sheet Metal and Roofing Contractors' Association, Kentucky Hotel, Louisville, May 24, 1926. O. E. Hutchison, Secretary, 1526 Christy Avenue, Louisville.

National Association of Sheet Metal Contractors, Louisville, Kentucky, May 24 to 28, 1926. Edwin L. Seabrook, Secretary, 608 East Chestnut Street, Philadelphia, Pennsylvania.

American Society of Heating and Ventilating Engineers, Lexington, Kentucky, May 26 to 28, 1926. A. V. Hutchinson, Manager of Publications, 29 West 39th Street, Aurora, Illinois.

Carolinas Hardware Association, Raleigh, North Carolina, June 8 to 10, 1926. A. R. Craig, Secretary, 717-18 Commercial Bank Building, Charlotte, North Carolina.

Mississippi Retail Hardware and Implement Association, Biloxi, June 21, 22 and 23, 1926. Guy Nason, Secretary Starkville.

National Retail Hardware Association 27th Annual Congress, June 21 to 24, 1926. Herbert P. Sheets, Secretary, 915 Meyer Kiser Bldg., Indianapolis, Indiana.

### Retail Hardware Doings

#### Illinois.

Hamil Veach and Charles Dunham have opened a hardware store at Macomb.

#### Indiana.

Moore and Kemple Hardware of Lafayette have sold out to George W. Baxter and Clifford J. Todd.

Sharp Hardware Company of Milford has been incorporated with a capital of \$50,000. Incorporators are: Lloyd L. Burris, Harlan H. Sharp, Thomas L. Sharp.

#### Michigan.

Ted Schubel and Manford Watt have purchased the interest of E. U. Lewis and Company in their hardware at Port Austin.

#### Minnesota.

J. G. Thurlow and Son are erecting a hardware store at Nisswa.

The Gibbs and Wakefield Hardware Company of Wazata has been destroyed by fire. The loss is estimated at \$15,000.

#### Montana.

The Helena Hardware Store at 316 South Main Street, Helena, has been destroyed by fire.

#### Nebraska.

B. A. Gietzen has sold his hardware business at Columbus to G. E. Jones.

Ralph Soderstrom has purchased an interest in the Conroy Brothers Hardware business at Sheldon.

B. A. Geitzen has sold his hardware store at Lincoln to G. E. Jones.

#### North Dakota.

The Lovell Brothers Hardware Store at Beach has been sold to W. W. Mills.

#### Ohio.

Glen Holdren has opened a hardware store at Good Hope.

#### Wisconsin.

Boulder Junction Lumber and Supply Company have opened a general hardware business at Boulder Junction.

Hayward Hardware Company of Hayward will have temporary quarters at the Eagle Hall, and will put in a new stock of hardware.

F. A. Craig of Apple River, Illinois, has purchased the interest of Fred H. Hughes in the Hughes and Raisel Hardware Store at Darlington.

Gail Davis has sold his interest in the Davis and Bonna Hardware Company at Hayward.

T. C. Wood has moved his hardware store at Rhinelander to 24 South Brown Street.

The Krueger Hardware Company has purchased the Masonic property on South Commercial Street, Neenah, and will erect a store there.

Haumerson Brothers have sold their hardware business at Fort Atkinson to George Lohmaier and Ernie Gebhardt.

### C. D. Salyers, Carrollton, Kentucky, Dies After Long Hardware and Sheet Metal Career

C. D. Salyers, widely known among old-timers in hardware in Ohio, Indiana and Kentucky, died on May 1 at the home of his son in Carrollton, Kentucky, after more than sixty years in the hardware and sheet metal contracting business. He is survived by one son, W. L. Salyers, who represents Moore Bros. Company in the South; two brothers, T. D. and R. F. Salyers, who are engaged in the hardware business in San Diego, California, and by a sister, Mrs. G. B. Cockrell, of Cumberland Gap, Tennessee.

### Few Buyers Now in Market for Speculative Houses

The warm air furnace dealer who complains that speculative builders are interested in price only when buying heating systems (and there are many who make that complaint) is missing a real opportunity, according to *Furnace Installer*.

Building is fast coming into a period of keen competition. There are fewer buyers on the market for speculative houses. Consequently builders must meet the wishes of their customers more carefully. As competition increases, buyers become more exacting and builders must have stronger sales arguments.

Can you think of any stronger sales argument for a builder than to be able to say that his houses have guaranteed heat?

No! Neither can a builder.

The furnace dealer who gives a speculative builder a low price for installing a heating system that he knows is not up to Standard Code requirements, just because he fears he might lose the business is not only wasting his time and money but he is letting the builder place him in a false position, to say nothing of opening the way for future trouble and a loss of business.

When the dealer explains to a builder how a good heating system in a house increases its salability and how a little extra money spent for a Standard Code job doubles itself several times in the final price of the house, in the majority of cases, he can convince the builder and make a profitable business.

Most builders know very little about heating. Nor do the majority of them realize what a strong sales argument they have when they install good heating systems in their houses. Furnace dealers must educate them on this point. They should explain the increased value that a Code job adds to a house. If they fail to grasp this opportunity, they lose the chance of developing a phase of the furnace business that is now often unsatisfactory, but which can be made profitable.



## A Roofing Tin with a 35 Year Record for Durability

**I**N all parts of the country there are buildings on which Wheeling Roofing Tin has given uninterrupted service for more than a quarter century.

It has served well and its service has earned a good name nationally known among architects, builders and sheet metal workers—in fact, among all who have learned of its economy and durability from its actual use.

In this Roofing Tin of finest

Open Hearth Copper-Alloy Steel base (Ohio Metal) with heavy and uniform weight of Terne coating, nothing is omitted to insure the results in a finished roof that economy and good sense demand.

For permanence and economy use Wheeling 47 or 40 pound plates, made of Copper-Alloy Steel (Ohio Metal) uniformly and fully coated with new tin and new lead by the Wheeling hand-dipping process.

WHEELING CORRUGATING COMPANY, WHEELING, W. VA.

NEW YORK  
ST. LOUIS

PHILADELPHIA  
KANSAS CITY

CHATTANOOGA  
CHICAGO

MINNEAPOLIS  
RICHMOND

# Wheeling





# Steel Market Letdown Mild—May Starts Off With Some Elements of Better Activity

*Pig Iron Activity Confined to Moderate Size Lots — Non-Ferrous Prices Fairly Steady*

**F**OLLOWING the relaxing of the iron and steel market which ran through the month of April, May has started off with less evidence of general sagging while some elements of improvement, at least in sentiment, are developing.

Pittsburgh sees indications this week that buyers have worked off tonnage taken in March against April needs and again are coming into the market with fresh commitments.

Chicago has detected some symptoms pointing to the low point in the recent dip having been passed.

Specifications with the leading interest there again are above shipments, though only slightly.

Large producers in New York territory booked 5 per cent more tonnage in April than in March.

The market as a whole lacks animation and there is considerable show of hesitation among buyers in some lines but apparently the absorption of tonnage for many purposes still is on a high plane.

Prices in several lines of steel while soft do not appear to be weakening further.

Sheets show more deviations and a wider general range. Strip is better held. Plates seem steadier again.

## **Copper.**

This metal has eased off slightly and whereas as high as 14 cents delivered Connecticut was asked by some producers, this price had disappeared today and the market appeared to be fixed at 13.87½ cents.

Of outstanding importance in the copper market during the past week has been the increase in copper freight rates to become effective in June.

That the proposed copper export association now is a surety is seen in the fact that a number of American copper men during the past few

days have sailed for Europe to study the market there for the proposed association.

## **Zinc.**

Some sellers have been trying to make a market in this metal and as a result prices have weakened slightly.

At the moment prompt June metal is held at 6.70 cents to 6.75 cents, East St. Louis, around which level it has been held for the past week.

## **Lead.**

The American Smelting & Refining Co. has held to its price of 7.85 cents, New York, despite the fact that early last week the open market went up to 7.95 cents.

This latter price was not held, however, and today the open market again is back to 7.85 cents, New York, and 7.65 cents to 7.70 cents East St. Louis.

The market is fairly steady.

## **Tin.**

Higher prices are predicted with a squeeze in early supplies of metal still reported.

The labor situation in Europe also is expected to be a factor for strength in this market and in fact at the moment such influence already has been felt.

Spot Straits is held at 63 cents but future shipment from the Straits is down to 58.87½ cents.

## **Pig Iron.**

Pig iron buyers remain out of the market.

Many foundries are experiencing a reduced demand for castings and are cutting operating schedules.

One or two sellers, however, note an increase in spot buying in directions where no iron was sold throughout April. These orders usually are for 100 or 150 tons of foundry or malleable, with a few 500-ton lots.

Nineteen dollars, valley, still is

quoted on No. 2 foundry and malleable.

A few sales of 500 tons are noted in the Canton and Akron, Ohio, districts. Steel-making iron is unchanged, small lots of bessemer are bringing \$19.50.

Basic shows no life; the price is \$18.50, valley.

Shipments of both merchant iron and foundry coke by an important interest in the seven months ended with April were higher than in any previous 7-month period.

May has opened at substantially the same rate as April. In the past few days inquiry for prompt shipment, involving business ranging from a carload to several hundred tons, has increased.

A southern Michigan stove maker has closed on 500 tons while a similar inquiry from a similar interest is pending. Northern iron is holding at \$22, Chicago furnace for malleable and No. 2 foundry.

At Birmingham the pig iron market continues quiet.

Consumers are watching for a deflection in the quotation of \$22 base.

## **Old Metals.**

Wholesale quotations in the Chicago district, which should be considered as nominal, are as follows: Old steel axles, \$17.50 to \$18.00; old iron axles, \$25.50 to \$26.00; steel springs, \$18.50 to \$19.00; No. 1 wrought iron, \$13.00 to \$13.50; No. 1 cast, \$15.50 to \$16.00, all per net tons. Prices for non-ferrous metals are quoted as follows, per pound: Light copper, 9 cents; zinc, 5 cents, and cast aluminum, 19 cents.

## **Solder.**

Chicago warehouse prices on solder are as follows: Warranted 50-50, \$40.50; commercial 45-55, \$38.00, and plumbers', \$35.50, all per 100 pounds.



# UNISHEAR

Portable and compact, Unishear cuts *any flat stock* quicker, better, cheaper—without burr, without distortion of material. Follows any line exactly, stops accurately at any point.

Needs but one operator even on largest work, straight or irregular.

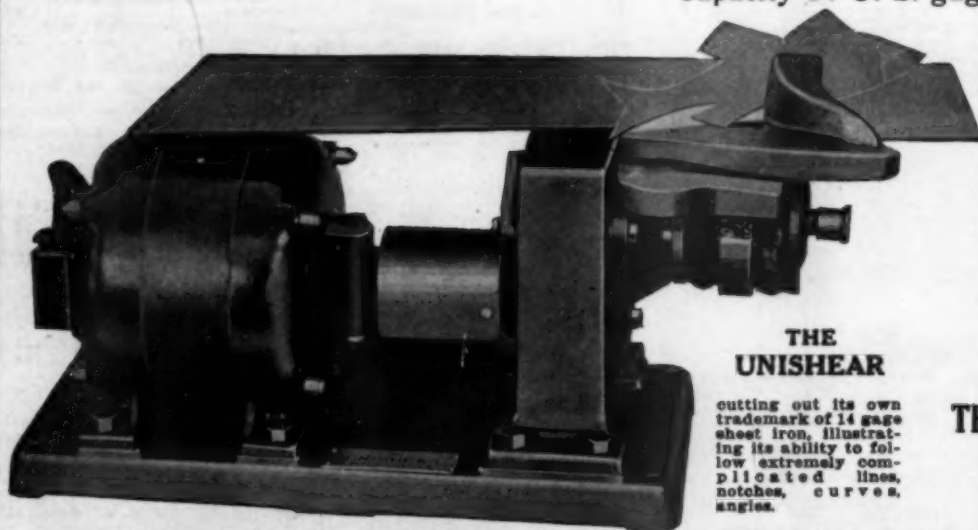
Operates from lamp socket or power circuit. "General Electric Motor" any Voltage or Cycle Available.

Capacity 14 U. S. gage Sheet Steel.

*Speed fifteen feet per minute.*

Ask us to demonstrate this machine on your work.

Dealers and Salesmen wanted in unassigned territory.



THE  
UNISHEAR

cutting out its own trademark of 14 gage sheet iron, illustrating its ability to follow extremely complicated lines, notches, curves, angles.

**The Unishear Co., Inc.**

170 FIFTH AVENUE  
NEW YORK, N. Y.

(For export apply to: Unishear Corporation, 104 Fifth Avenue, New York, N. Y.)

## EVERYTHING USED IN SHEET METAL WORK

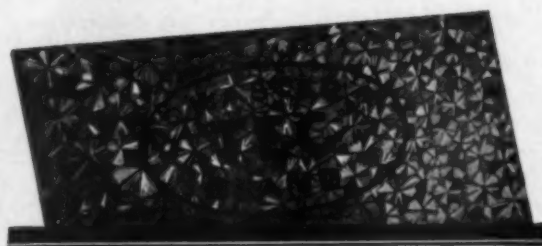
### *A Complete Stock Insures Prompt Shipment*

In our warehouse you will find one of the most complete stocks in the country. Not only complete as to quantity but selected by men who have had many years of experience.

There are 12 men in our employ who have been with us a total of 261 years—an average of 22 years per man. It is the knowledge resulting from this experience that we offer you in Osborn Service.

**The J. M. & L. A. OSBORN CO.**  
CLEVELAND

Buffalo Warehouse, 64-68 Rapin Street



The mark of superior quality on Galvanized Steel Sheets

## INLAND "TEC" Master Brand Sheets

Inland "TEC" Master Brand sheets are now available. The Master Brand mark signifies that the sheets bearing it have been manufactured under the exacting specification of the Trade Extension Committee and are subject to constant inspection and test. Inland Master Brand sheets carry a double assurance of uniform quality; each sheet also carries the Inland brand mark.

### INLAND STEEL COMPANY

General Offices: 38 South Dearborn Street, Chicago

Mills: Indiana Harbor, Ind., Chicago Heights, Ill., Milwaukee, Wis.

Branch Offices and Representatives

St. Paul Seattle St. Louis San Francisco Salt Lake City  
Milwaukee Kansas City New Orleans Los Angeles

# Chicago Warehouse Metal and Furnace Supply Prices

AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing Western Hardware and Metal prices corrected weekly.

## METALS

### PIG IRON

Chicago Foundry.....	\$22 00
Southern Fdy., No. 2, 27 01	28 01
Lake Superior Charcoal.....	28 04
Malleable.....	23 00

### FIRST QUALITY BRIGHT TIN PLATES

IC 20x28 112 sheets.....	\$25 10
IX 20x28.....	29 60
IXX 20x28 56 sheets.....	16 20
IXXX 20x28.....	17 55
IXXXX 20x28.....	18 95

### TERNE PLATES

	Per Box
IC 20x28, 40-lb. 112 sheets	\$27 90
IX 20x28, 40-lb. " "	30 90
IX 20x28, 25-lb. " "	22 20
IX 20x28, 25-lb. " "	25 20
IC 20x28, 20-lb. " "	20 25
IV 20x28, 20-lb. " "	23 00
IC 20x28, 15-lb. " "	16 55
IC 20x28, 12-lb. " "	15 25

### "ARMCO" INGOT IRON PLATES

No. 3 ga. up to and including	
1/4 in.—100 lbs.....	4 55

### COKE PLATES

Cokes, 80 lbs., base, 20x28.....	\$12 60
Cokes, 90 lbs., base, 20x28.....	12 80
Cokes, 100 lbs., base, 20x28.....	13 00
Cokes, 107 lbs., base, IC 20x28.....	13 30
Cokes, 135 lbs., base, IX 20x28.....	15 70
Cokes, 155 lbs., base, 56 sheets.....	8 70
Cokes, 175 lbs., base, 56 sheets.....	9 55
Cokes, 195 lbs., base, 56 sheets.....	10 40

### BLUE ANNEALED SHEETS

Base 10 ga.....per 100 lbs.	\$2 80
"Armco" 10 ga.....per 100 lbs.	4 00

### ONE PASS COLD ROLLED BLACK

No. 18-20.....per 100 lbs.	\$3 20
No. 22-24.....per 100 lbs.	3 35
No. 26.....per 100 lbs.	3 90
No. 27.....per 100 lbs.	3 95
No. 28.....per 100 lbs.	4 10
No. 29.....per 100 lbs.	4 10

### GALVANIZED

"Armco" 28.....per 100 lbs.	\$6 70
No. 18.....per 100 lbs.	4 50
No. 18-20.....per 100 lbs.	4 55
No. 22-24.....per 100 lbs.	4 80
No. 26.....per 100 lbs.	4 95
No. 27.....per 100 lbs.	5 10
No. 28.....per 100 lbs.	5 25
No. 29.....per 100 lbs.	6 75

### BAR SOLDER

Warranted 50-50.....per 100 lbs.	40 50
Commercial 45-55.....per 100 lbs.	28 00
Plumbers.....per 100 lbs.	35 50

### ZINC

In Slabs.....	8 50
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### SHEET ZINC

Cash Lots (600 lbs.).....	13 75
Sheet Lots.....	14 75

### BRASS

Sheets, Chicago base.....	18 1/2 c
Mill base.....	18 1/2 c
Tubing, braced base.....	27 1/2 c
Wire, base.....	19 1/2 c
Rods, base.....	16 1/2 c

### COPPER

Sheets, Chicago base.....	22 1/2 c
Mill base.....	22 1/2 c
Tubing, seamless base.....	25 1/2 c
Wire No. 9 & 10, B & S. Ga.	20 1/2 c
Wire No. 11, B & S. Ga.....	20 1/2 c

## HARDWARE, SHEET METAL SUPPLIES, WARM AIR FURNACE FITTINGS AND ACCESSORIES.

### LEAD

American Pig.....	\$ 8 70
Bar.....	9 70

### Sheet

Full Colls.....per 100 lbs.	14 00
Cut Colls.....per 100 lbs.	14 25

### TIN

Pig Tin.....per 100 lbs.	72 00
Bar Tin.....per 100 lbs.	73 00

### ASBESTOS

Paper up to 1/16.....	60 per lb.
Roll board.....	6 1/2 c per lb.
Mill board 3/32 to 1/4.....	60 per lb.
Corrugated Paper (250 sp. ft. to roll).....	\$6.00 per roll

### BRUSHES

Hot Air Pipe Cleaning Bristle, with handle, each	\$6 55
--	--------

### Fine Cleaning

Steel Only, each.....	1 35
-----------------------	------

### BURRS

Coppers Burrs only.....	45 c
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### CEMENT, FURNACE

American Seal, 5-lb. cans, net	\$ 45
American Seal, 50-lb. cans, net	30
American Seal, 25-lb. cans, net	30
Asbestos, 5-lb. cans, net.....	45
Pecora.....per 100 lbs.	7 51

### CHIMNEY TOPS

Iwan's Complete Rev. & Vent.....	30 c
Iwan's Iron Mountain only.....	35 c
Standard.....	30 to 40 c

### CLINKER TONGS

Front Rank, each.....	\$ 75
Per doz.....	5 40

### CLIPS

Acme, with tail pieces, per doz.....	\$1 25
Non Rivet tail pieces, per doz.....	35

### COPPERS—Soldering

Pointed Roofing	
1 lb. and heavier.....per lb.	40 c
2 1/2 lb. ....per lb.	45 c
1 lb. ....per lb.	48 c
1 1/2 lb. ....per lb.	55 c
1 lb. ....per lb.	60 c

### CORNICE BRAKES

Chicago Steel Bending Nos. 1 to 6B.....	Net
---	-----

### COUPLING HOSE

Brass.....per doz	\$1 30
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### CUT-OFFS

Kuehn's Korrekkt Cut-offs: Galv., plain, round, or cor. rd standard gauge.....	40 c
28 gauge.....	20 c

### DAMPERS

"Yankee" Hot Air 7 inch, each 20c, doz.....	\$1 75
8 inch, each 25c, doz.....	2 40
9 inch, each 30c, doz.....	2 75
10 inch, each 35c, doz.....	3 00

### Smoke Pipe

7 inch, each.....	\$ 35
8 inch, each.....	40
9 inch, each.....	50
10 inch, each.....	60
12 inch, each.....	90

### Reversible Check

8 inch, each.....	\$1 50
9 inch, each.....	1 70

### DIGGERS

Post Hole Iwan's Split Handle (Bureka) 4-ft. Handle.....per doz.	\$14 00
7-ft. Handle.....per doz.	35 00
Iwan's Hercules pattern, per doz.....	14 90

### EAVES TROUGH

Galv. Crimpedge, crated.....	75 & 5 c
------------------------------	----------

### ELBOWS

Conductor Pipe Milcor, Galv., plain or corrugated, round flat Crimp.	
Std. Gauge.....	55 c
28 Gauge.....	55 c
26 Gauge.....	40 c
24 Gauge.....	10 c

### Square Corrugated

Standard Gauge.....	50 c
No. 28 Gauge.....	45 c
26 Gauge.....	30 c

### Fortico Elbows

Standard Gauge Conductor Pipe, plain or corrugated.	
Not nented.....	70 & 5 c
Nested solid.....	70 & 5 c

### ELBOWS—Stove Pipe

1-piece Corrugated, Uniform Blue "Milcor" No. 28 gauge.	
Doz.	
5-inch.....	\$1 15
6-inch.....	1 25
7-inch.....	1 75

### Special Corrugated

6-inch.....	\$1 00
7-inch.....	1 60

### Adjustable—Uniform Blue

"Milcor" No. 28 Gauge, Uniform Blue.	
5-inch.....	\$1.65
6-inch.....	1 75
7-inch.....	2 40

### WOOD FACES—50% off list.

FENCE 726-6-12% (100 rods).....	\$29 03
1948-6-14% (100 rods).....	44 03

### FILES AND RASPS

Heller's (American).....	50-10 c
American.....	60-10 c
Arcade.....	50 c
Black Diamond.....	40-10 c
Eagle.....	50 c
Great Western.....	50 c
Kearney & Foot.....	50 c
McClellan.....	50 c
Nicholson.....	50 c
Simonds.....	60 c

### FIRE POT

Otto Berns Co. East of west boundary line of Province of Manitoba, Canada, No. Dakota, So. Dakota, Nebraska, Kansas, Oklahoma, Amarillo, San Angelo and Laredo, Texas.....	65 c
West of above boundary line	61 c

### Clayton & Lambert's

East of west boundary line of Province of Manitoba, Canada, No. Dakota, So. Dakota, Nebraska, Kansas, Oklahoma, Amarillo, San Angelo and Laredo, Texas.....	62 c
West of above boundary line	45 c

### Geo. W. Diener Mfg. Co.

No. 32 Gasolene Torch, 1 qt. ....	\$ 5 50
No. 3250, Kerosene, or Gasolene Torch, 1 qt. ....	7 50
No. 10 Tinner's Furn. Square tank, 1 gal. ....	13 00
No. 15 Tinner's Furn. Round tank, 1 gal. ....	13 00
No. 21 Gas Soldering Furnace.....	8 00
No. 110 Automatic Gas Soldering Furnace.....	10 50

### Double Blast Mfg. Co.

Gasolene, Nos. 25 and 35.....	50 c
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### Quick Meal Stove Co.

Vesuvius, F. O. B. St. Louis 30% (Extra Disc't. for large quantities)	
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### Chas. A. Homes, Inc.

Buzzer No. 1.....	\$ 9 00
Buzzer No. 2.....	13 00
Buzzer No. 23.....	13 00
Buzzer No. 32.....	15 00
Buzzer No. 43.....	19 00

### GALVANIZED WARE

Pails (Galv. after made), 18-qt. ....	\$2 20
19-qt. ....	\$2 30

### GLASS

Single Strength, A. 36-in. bracket.....	55 c
Single Strength, A. 34 to 40-in. bracket.....	55 c
Single Strength A, all other brackets.....	51 c
Double Strength A, all sizes.....	53 c
Tubs (Galv. after made), No. 1.....	\$6 30
No. 2.....	7 50

### HANGERS

Conductor Pipe Milcor Perfection Wire.....	55 c
--	------

### Eaves Trough

Milcor Eclipse Wire.....	15 c
Milcor Triplex Wire.....	10 c
Milcor Milwaukee Extension 10% Milcor Steel (galv. after forming) List plus.....	12 1/2 c
Milcor Seidack E. T. Wire, List plus.....	50 c

### HOOBS

Box V. & B. No. 1, each.....	\$9 20
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### Conductor

Milcor "Direct Drive" Wrought Iron for wood or brick.....	15 c
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### HAY

V. & R. No. 1, each.....	\$9 20
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### HUMIDIFIERS

"Front-Back," Automatic In single lots.....	50 c
In lots of 10 or more.....	50-55 c
In lots of 25 or more.....	50-10 c
Vapor pans, etc., each.....	50 c

### LIFTERS

Steve Cover Coppered.....per gro.	\$8 00
Alaska.....per gro.	4 75

### WALLETS

Tinner's Hickory.....per doz.	\$3 30
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### MITRES

Galvanized steel mitres, and caps, end pieces, outlets.....	30 c
Milcor Galv. one piece stamped.....	40 c

### NAILS

Cut Steel.....	\$4 50
Cut Iron.....	4 50

### Wire

Common.....	\$ 15
Cement Coated.....	2 70

(Continued on page 44)



# "STANDARD"

THE

"

## Ventilator



IS of the rotatable type and swings absolutely free in the slightest draft. The construction is scientifically correct and unusually strong. It works perfectly in all kinds of weather and handles 50 per cent more air than stationary ventilators of equal size. Order from your jobber. Write for our catalog and prices today.

Manufactured by

**STANDARD VENTILATOR CO.**

LEWISBURG, PA.

This is as fine an ear as can be made. Perfect, fine finish and nicely tinned. Write today for samples.

## BERGER'S WROUGHT STAR EARS



Furnished in gross boxes or in bulk to suit the purchaser

We can furnish sizes 20, 30 & 40 stamped from sheet brass.

No. 40

Write today for our catalog which illustrates our complete line of ears  
**BERGER BROS. CO.**  
229 to 237 ARCH STREET  
WAREROOMS AND FACTORY: 100 to 114 BREAD STREET  
PHILADELPHIA, PA.

## PERFORATED METALS



All Sizes and Shapes of Holes  
In Steel, Zinc, Brass, Copper, Tinplate, etc.  
For All Screening, Ventilating and Draining  
EVERYTHING IN PERFORATING METAL

**THE HARRINGTON & KING PERFORATING CO.**

5649 FILLMORE ST.-CHICAGO, ILL. U. S. A.  
NEW YORK OFFICE: 114 LIBERTY ST.

## Hopson Metal Ceilings and Sides

Tasty, dignified designs, characterize Hopson Metal Ceilings and Sides. They're all easy to match and install. Our pictorial catalogue will show what we have to offer in original designs. Get a copy today.

**W. C. HOPSON CO.**

216 Ellsworth Ave.

Grand Rapids, Mich.

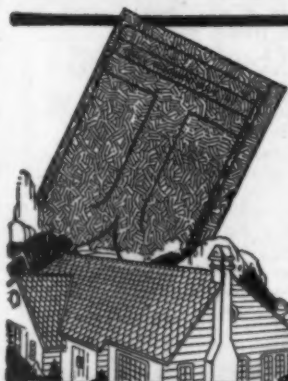
# If

it's made of Sheet Metal or it's used in working Sheet Metal and

# You

don't know where to get it—

Write to the Notes and Queries Dept. of  
**AMERICAN ARTISAN**



**WE** make both kinds of galvanized shingles — hand dipped being stamped from prime tin plate and immersed one at a time in molten zinc and the other kind which are stamped from sheets already galvanized.

We also make painted shingles—either red or green.

**CORTRIGHT METAL ROOFING CO.**  
50 N. 23rd Street, Philadelphia  
528 S. Clark Street, Chicago

**CORTRIGHT METAL SHINGLES**

## IT'S THE FURNACE

for melting lead and heating soldering irons at same time



No. 60—1 GALLON  
Gasoline-Kerosene

FITTED with many improvements which are patented or have patents applied for. Ask for No. 40 catalog describing this furnace, also complete "ALWAYS RELIABLE" line of furnaces and torches. Also a full line of plumbers' tools.

Most jobbers stock. Others will order for you.

**OTTO BERNZ CO. INC., Newark, N. J.**

Offices in New York City, Chicago, Fort Worth, Denver, Helena, Mont., San Francisco, Los Angeles, Seattle and St. Thomas, Ont.

Read the Wants and Sales Pages



# ADVERTISERS' INDEX

The dash (—) indicates that the advertisement runs on a regular schedule but does not appear in this issue.

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Berger Bros. Co. ....	43	New Jersey Zinc Sales Co., The	—
Berger Co., L. D. ....	—	.....Front Cover	—
Berns Co., Otto ....	43	Northwestern Stove Repair Co. 10	—
Bertsch & Co. ....	—		
Brillion Furnace Co. ....	—		
Burgess Soldering Furnace Co. ....	—		
C		O	
Chicago Elbow Machine Co. ....	45	Oakland Fdy. Co. ....	—
Chicago Furnace Supply Co. ....	9	Osborn Co., The J. M. & L. A. 41	—
Chicago Solder Co. ....	—		
Clark-Smith Hardware Co. ....	45		
Clayton & Lambert Mfg. Co. ....	45		
Cleveland Castings Pattern Co. ....	10		
Cos Wrench Co. ....	—		
Connors Paint Co., Wm. ....	10		
Copper & Brass Research Association ....	—		
Cortright Metal Roofing Co. ....	43		
Cox Co., Abram ....	—		
D		P	
Davis and Co., Inc., C. S. ....	—	Parker-Kalon Corp. ....	—
Dieckmann Co., Ferdinand. ....	—	Peck, H. E. ....	50
Diener Mfg., Geo. W. ....	—	Peck, Stow & Wilcox Co. ....	—
Double Blast Mfg. Co. ....	—	Pecora Paint Co. ....	—
Double-Duty Elbow Co. ....	45	Peerless Foundry Co. ....	7
Dreis & Krump Mfg. Co. ....	45	Peninsular Stove Co. ....	—
E		Q	
Eaglesfield Ventilator Co. ....	—	Quick Meal Stove Co. ....	—
Excelsior Steel Furn. Co. ....	11	Quincy Pattern Co. ....	10
F		R	
Fanner Mfg. Co. ....	—	Robinson Furnace Co. ....	—
Floral City Heater Co. ....	8	Rock Island Register Co. ....	—
Forest City Fdy. & Mfg. Co. ....	—	Royal Ventilator Company ....	—
Fox Furnace Co. ....	—	Rudy Furnace Co. ....	—
Friedley-Voshardt Co. ....	—	Ryerson & Son, Inc., Jos. T. ....	—
G		Rybolt Heater Co. ....	—
Gerock Bros. Mfg. Co. ....	—		
Granite City Steel Works ....	—		
Gray & Dudley Co. ....	10		
Great Lakes Supply Co. ....	45		
H		S	
Harrington & King Perf. Co. 43		Sall Mountain Co. ....	—
Hart & Cooley Co. ....	—	Schwab & Sons, R. J. ....	—
Heating Systems & Supply Co. ....	—	Security Stove & Mfg. Co. ....	—
Henry Furnace & Fdy. Co. ....	6	S. L. Products Co. ....	—
Hero Furnace Co. ....	—	Sheet Steel Trade Ex. Comm. ....	—
Hess-Snyder Co. ....	7	Special Chemicals Co. ....	—
Hessler Co., H. E. ....	47	Standard Fdy. & Mfg. Co. ....	8
Homer Furnace Co. ....	—	Standard Furn. & Supply Co. ....	8
Hopson Co., W. C. ....	43	Standard Ventilator Co. ....	43
Howes Co., S. M. ....	10	Stearns Register Co. ....	—
Hussey Co., C. G. ....	45	St. Louis Heating Co. ....	—
I		St. Louis Tech. Inst. ....	50
Inland Steel Co. ....	41	St. Clair Foundry Corp. ....	4
International Heater Co. ....	—	Sturtevant Co. ....	—
K		Success Heater Mfg. Co. ....	—
Kirk-Latty Mfg. Co. ....	10		
Kruse Co. ....	9		
L		T	
Lalanc & Grosjean Mfg. Co. 47		Taylor Co., N. & G. ....	—
Lamneck & Co., W. E. ....	14	Thatcher Co. ....	—
Langenberg Mfg. Co. ....	—	Technical Products Co. ....	—
Lennox Furnace Co. ....	—	Tuttle & Bailey Mfg. Co. ....	—
Liberty Foundry Co. ....	—		
Lupton's Sons Co., David ....	3		
		U	
		Unishear Co., The, Inc. ....	41
		United States Register Co. ....	—
		Utica Heater Co. ....	5
		V	
		Vedder Pattern Works ....	10
		Viking Shear Co. ....	—
		W	
		Warm Air Furnace Fan Co. ....	—
		Walworth Run Fdy. Co. ....	11
		Watermann-Waterbury Co. ....	—
		Western Steel Products Co. ....	4
		Wheeling Corr. Co. ....	29
		Whitney Metal Tool Co. ....	—
		Whitney Mfg. Co., W. A. ....	45
		Williams Hardware Co. ....	45
		Williamson Heater Co. ....	—
		Wise Furnace Co. ....	6

## Markets—Continued from page 42

### NETTING, POULTRY

Galvanized before weav- ing .....	45-10%
Galvanized after weaving..	45%

### PASTE

Asbestos Dry Paste:	
200-lb. barrel.....	\$15 00
100-lb. barrel.....	8 00
25-lb. pail.....	3 25
10-lb. bag.....	1 00
5-lb. bag.....	55
2 1/2-lb. cartons .....	20

### PIPE

Conductor	
Cor. Rd., Plain Rd or Sq.	
"Interlock" Galvanized	
Crated and nested (all gauges).....	75-75%
Crated and not nested (all gauges).....	70-75%
"Milcor" "Titelock" Uniform	

Blue Stove	
28 gauge, 5 inch U. C.	
nested .....	11 00
28 gauge, 6 inch U. C.	
nested .....	12 00
28 gauge, 7 inch U. C.	
nested .....	14 00
30 gauge, 5 inch U. C.	
nested .....	10 00
30 gauge, 6 inch U. C.	
nested .....	10 50
30 gauge, 7 inch U. C.	
nested .....	13 00

T-Joint Made up	
6-inch, 28 ga.....per 100	23 50
Furnace Pipe	
Double Wall Pipe and	
Pipe Fittings.....	50%
Single Wall Pipe, Round	
Iron Pipe Galvanized.....	50%
Galvanized and Black	
Fittings .....	50%
Milcor Galvanized	
Pipe and Fittings.....	50%

Lead	
Per 100 lbs.....	\$13 50
POKERS, STOVE	
Wr't Steel, str't or bent,	
.....per doz.	\$0 75
Nickel Plated, coil handles,	
.....per doz.	1 10

### POKERS, FURNACE

Each .....	\$0 50
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### PULLEYS

Furnace Tackle.....per doz.	\$0 50
per gross	5 00
Furnace Screw (encased)	
.....per doz.	75
Ventilating Register	
Per gross .....	3 00
Small, per pair.....	20
Large, per pair.....	50

### PUTTY

Commercial Putty, 100-lb.	
kits .....	\$3 40

### QUADRANTS

Malleable Iron Damper.....	10%
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REDUCERS—Oval Stove Pipe	
Per doz.	
7-8, 1 doz. in carton.....	\$2 00

### BASEBOARD REGISTERS

Excelsior .....	50%
-----------------	-----

### FLOOR REGISTERS AND BORDERS

Cast Iron .....	20%
Steel and Semi-Steel.....	40%
Baseboard .....	40%
Adjustable Ceiling	
Ventilators .....	40%

Register Faces—Cast and Steel	
Japanned, Bronzed and	
Plated, 4x6 to 14x14.....	40%
Large Register Faces—Cast,	
14x14 to 28x42.....	60%
Large Register Faces—Steel,	
14x14 to 28x42.....	65%

### RIDGE ROLL

Milcor	
Galv., Plain Ridge Roll,	
W'd'd .....	75-10-5%
Galv., Plain Ridge Roll,	
crated .....	75-10%
Globe Finials for Ridge Roll.....	50%

### ROOFING

Best grade, slate surf. prep'd	35 50
Best talc surfaced.....	2 50
Medium talc surfaced.....	2 00
Light talc surfaced.....	1 20
Red Roofs Sheeting, per ton	57 00

### SCREWS

Sheet Metal	
No. 7, 1/2x1/4, per gross.....	\$0 55
No. 10, 3/8x1/4, per gross.....	45
No. 14, 1/2x1/4, per gross.....	55

### SHEARS, TINNERS' & MACHINISTS'

Viking .....	\$22 00
Lennox Throatless	
No. 12 .....	25%
Shear blades .....	10%
(f. o. b. Marshalltown, Iowa.)	

Peerless Steel Squaring	
Foot Power	
No. 1-30", 16 ga. cap.....	15%
No. 2-36", 16 ga. cap.....	15%
No. 4-48", 16 ga. cap.....	15%
No. 10-120", 22 ga. cap.....	15%
No. 4A-51", 16 ga. cap.....	15%

Cast Iron Foot Power	
No. 61-80", 16 ga. cap.....	15%

Power Driven	
No. 100 Series, 2 Shaft Drive,	
No. 145-42", 16 ga. cap.....	15%
(No. 200 Series, 2 Shaft Under	
neath Drive.)	
No. 343-42", 16 ga. cap.....	15%
(No. 300 Series, 3 Shaft Under	
neath Drive.)	
No. 343-42", 16 ga. cap.....	15%
No. 373-72", 16 ga. cap.....	15%
(No. 500 Series, 1 Shaft Under	
neath Drive.)	
No. 500-80", 16 ga. cap.....	15%
(No. 600 Series, 3 Shaft Under	
neath Drive.)	
No. 6130-120", 2 1/16" cap.....	15%

### SHOES

Milcor	
Galv. Std. Gauge, Plain or	
corr. round flat crimp.....	45%
28 gauge round flat crimp.....	40%
24 gauge round flat crimp.....	10%
Conductor .....	55%

### SNIPS, TINNERS'

Clover Leaf .....	40 & 10%
National .....	40 & 10%
Star .....	50%
Milcor .....	No.

### SQUARES

Steel and Iron.....Net	
(Add for bluing, \$5 per doz. net.)	
Mitre .....	Net
Try .....	Net
Try and Bevel.....Net	
Try and Mitre.....Net	
Fox's .....	per doz. \$0 00
Winterbottom's .....	10%

### STOPPERS, FLUE

Common .....	per doz. \$1 10
Gem, No. 1.....	per doz. 1 10
Gem, flat, No. 2.....	per doz. 1 00

### VENTILATORS ..

Standard .....	30 to 40%
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### WIRE

Plain annealed wire, No. 8	
per 100 lbs. ....	\$1 00
Galvanized barb wire, per	
100 lbs. ....	3 50
Wire cloth—Black painted,	
12-mesh, per 100 sq. ft.....	2 10
Cattle Wire—galvanized	
catch weight pool, per	
100 lbs. ....	3 50
Galvanized Hog Wire, 80 rod	
pool, per pool.....	3 50
Galvanized plain wire, No. 8,	
per 100 lbs. ....	3 50
Stove Pipe, per stone.....	1 10

### WRINGERS

No. 750, Guarantee	per doz. \$55 00
No. 770, Bicycle	per doz. 55 50
No. 670, Domestic	per doz. 45 50
No. 110, Brighton	per doz. 45 50
No. 750, Guarantee	per doz. 55 50
No. 740, Bicycle	per doz. 55 50
No. 23, pioneer	per doz. 29 00
No. 1, Superb	per doz. 29 00

When writing mention AMERICAN ARTISAN—Thank you!

**MAKE YOUR OWN ELBOWS—**

Any Size in Two Minutes with this Machine.

**J**UST take your straight pipe—fasten the form or jig to it and in two minutes you have your 3 or 4 piece adjustable elbow all ready for use and any size you want.

**PURNELL ELBOW EDGING and CUTTING MACHINE**

It is simple, sound and constructed of the very best materials—both installers and manufacturers are using it. No more large stock for the installer. Enables you to make adjustable elbows any size for each job at once when you need them.

Write today for circular giving complete description and price.

**Chicago Elbow Machine Co.**

MAIN OFFICE: 825 N. Boulevard, Oak Park, Ill.



Range of capacity 7 in. to 36 in. Elbows of No. 24 gauge and lighter



No. 91 Firepot  
Ask for latest price

**The No. 91 Is the Greatest General Utility Fire Pot**

The generator is powerful and produces intense heat. Will quickly heat a pair of twelve pound coppers and at same time a pot of metal may be melted. Top section may be removed and base used as a Torch, making it available for innumerable uses.

Your nearest Jobber will supply at Factory Price.

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**CHICAGO STEEL CORNICE BRAKES**

STANDARD OF THE WORLD



THE BEST BRAKE FOR ALL PURPOSES: Most Durable, Easiest Operated, Low in Price; Made in All Lengths and to Bend All Gauge of Metal. Over 25,000 in use.

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**Selling Rapidly Our Two Latest Lever Punches**

New No. 8 Medium-Capacity, Close-Corner Punch. Just out. Punches Easier, Deeper Throat, Simpler, Fewer Parts, Quicker punch changing—without Tools. Upper Lever does not throw back to Right Angle. Side Gauge. Length 18 inches. Capacity  $\frac{1}{4}$  through  $\frac{1}{2}$  Iron.

Same construction as No. 8 Punch above. Length 8 $\frac{1}{2}$  inches. Weight 2 $\frac{1}{2}$  lbs. Capacity  $\frac{1}{4}$  through 16 gauge iron.

Ask your Jobber or write us for information on our full Lever Punch line.

**W. A. Whitney Mfg. Company**

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**LIGHT SAMSON PUNCH**

**H**ERE is an unusually strong "active" tool. Standard in every particular for light capacity work. Capacity No. 9 gauge iron with stay bolts in place and No. 12 gauge iron when stay bolts are removed. This is a tool you need.

Write for Pexto Guide No. 25 A.

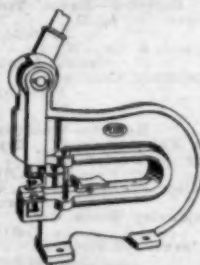
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Complete Pexto Chicago Stock—Tinner's Supplies of all Kinds—Phone J. H. Sutherland, South Chicago 7600

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**The Double-Duty BRAKE SHEAR**

(Patented)



Fits Any Brake

Always Ready for Use—Rapid—Clean Cutting

Cuts 30 gauge and lighter straight as a Power Shear

Simple—Absolutely Reliable

Folds up out of the way so brake work can be done

Strong—Easy to attach—Will last for years

**TRY IT TEN DAYS IN YOUR SHOP BEFORE YOU BUY**

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**WIRE GLASS FOR SKYLIGHTS**

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Ribbed, figured prism and polished wire. Plain, ribbed, figured prism and heavy floor glass.

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Manufacturers of SHEET COPPER, BOTTOMS, ROLL COPPER, TINNED and POLISHED COPPER, NAILS, SPIKES, RIVETS, CONDUCTOR PIPE, EAVES TROUGH, ELBOWS, SHOES, MITRES, CORRUGATED COPPER SHEETS, CRIMPED COPPER SHEETS, COPPER WALL TIES, COPPER LATH, ETC.  
Branch Warehouses in New York, Philadelphia, Cincinnati & Chicago  
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**Plecker's Galvanized Eave Trough and Corrugated Expanding Conductors**

Made of  
Keystone  
Copper Bearing  
Steel



Costs no more  
Lasts longer  
Therefore  
Cheapest

**CLARK-SMITH HARDWARE CO. - - PEORIA, ILLINOIS**

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- Asbestos Paper.**  
Ball Mountain Co., Chicago, Ill.
- Asbestos Products.**  
Ball Mountain Co., Chicago, Ill.
- Bale Ties.**  
American Steel & Wire Co., Chicago, Ill.
- Bolts—Stove.**  
Mirk-Latty Mfg. Co., Cleveland, Ohio
- Brakes—Bending.**  
Dreis & Krump Mfg. Co., Chicago, Ill.
- Brakes—Cornice.**  
Dreis & Krump Mfg. Co., Chicago, Ill.
- Brass and Copper.**  
Copper & Brass Research Association, New York  
Hussey & Co., C. G., Pittsburgh, Pa.  
Merchant & Evans Co., Philadelphia, Pa.
- Cans—Garbage.**  
Osborn Co., The J. M. & L. A., Cleveland, Ohio
- Castings—Malleable.**  
Fanner Mfg. Co., Cleveland, Ohio
- Ceilings—Metal.**  
Friedley-Voshardt Co., Chicago, Ill.
- Hepson & Co., W. C.,**  
Grand Rapids, Mich.  
Milwaukee Corrugating Co., Milwaukee, Wis.  
Wheeling Corrugating Co., Wheeling, W. Va.
- Chaplets.**  
Fanner Mfg. Co., Cleveland, Ohio
- Chains—Sash.**  
Parker-Kalon Corp., New York, N. Y.
- Chimney Tops.**  
Standard Ventilator Co., Lewisburg, Pa.
- Cleaners—Furnace.**  
Sturtevant, Boston, Mass.
- Chimney Tops.**  
Iwan Bros., South Bend, Ind.
- Cleaners—Suction.**  
Brown, Wm. R., Buffalo, N. Y.  
Sturtevant, Boston, Mass.
- Clinker Tongs.**  
Federal Mfg. Co., Holland, Mich.
- Copper.**  
Copper & Brass Research Association, New York  
Hussey & Co., C. G., Pittsburgh, Pa.
- Cornices.**  
Friedley-Voshardt Co., Chicago, Ill.  
Milwaukee Corrugating Co., Milwaukee, Wis.
- Cut-Offs—Main Water.**  
Allred Mfg. Co., Indianapolis, Ind.  
Milwaukee Corrugating Co., Milwaukee, Wis.
- Dampers.**  
S. M. Howes Co., Charlestown, Mass.
- Damper Clips.**  
S. M. Howes Co., Charlestown, Mass.
- Diffuser—Air Duct.**  
Aeolus-Dickinson Co., Chicago, Ill.
- Doors—Metal.**  
David Lupton's Sons Co., Philadelphia, Pa.
- Eaves Trough.**  
Barnes Zinc Products Co., Chicago, Ill.  
Berger Bros. Co., Philadelphia, Pa.  
Berger Co., L. D., Philadelphia, Pa.  
Clark-Smith Hardware Co., Peoria, Ill.  
Lupton's Sons Co., David, Philadelphia, Pa.  
Milwaukee Corrugating Co., Milwaukee, Wis.  
New Jersey Zinc Sales Co., The, New York, N. Y.  
Wheeling Corrugating Co., Wheeling, W. Va.
- Elbows and Shoes—Conductor.**  
American Rolling Mill Co., Middletown, Ohio  
Barnes Zinc Products Co., Chicago, Ill.
- Dieckmann Co., Ferdinand.**  
Cincinnati, Ohio
- Double-Duty Elbow Co., Aurora.**  
Ill. Lupton's Sons Co., David, Philadelphia, Pa.  
Milwaukee Corrugating Co., Milwaukee, Wis.
- Enamel Wire.**  
Lalanc & Grosjean Mfg. Co., Chicago, Ill.
- Wood Faces—Cold Air.**  
American Wood Register Co., Plymouth, Ind.  
Eaglesfield Ventilator Co., Indianapolis, Ind.  
Marsh Lumber Co., Dover, Ohio  
Milwaukee Corrugating Co., Milwaukee, Wis.
- Fences.**  
American Steel & Wire Co., Chicago, Ill.
- Flue Thimbles.**  
Milwaukee Corrugating Co., Milwaukee, Wis.
- Furnace Brushes.**  
Hardware Specialty Co., Fort Wayne, Ind.
- Furnace Cement—Asbestos.**  
Connors Paint Mfg. Co., Wm., Troy, N. Y.  
Milwaukee Corrugating Co., Milwaukee, Wis.  
Pecora Paint Co., Philadelphia, Pa.
- Furnace Rings.**  
Independent Register and Mfg. Co., Cleveland, Ohio  
Milwaukee Corrugating Co., Milwaukee, Wis.  
Walworth Run Fdy. Co., Cleveland, Ohio
- Furnace Fans.**  
Heating Systems & Supply Co., Chicago, Ill.  
Warm Air Furnace Fan Co., The, Cleveland, Ohio
- Furnaces—Warm Air.**  
American Furnace Co., St. Louis, Mo.  
American Foundry & Furnace Co., Bloomington, Ill.  
Brillion Iron Works, Brillion, Wis.  
Chicago Furnace Supply Co., Chicago, Ill.  
Cleveland Cooperative Store Co., Cleveland, Ohio  
Col-Burn Heater Co., Chicago, Ill.  
Cox Stove Co., Abram, Peoria, Ill.  
Excelsior Steel Furnace Co., Chicago, Ill.  
Floral City Heater Co., Monroe, Mich.  
Forest City Fdy. & Mfg. Co., Cleveland, Ohio  
Fox Furnace Co., Elyria, Ohio  
Gray & Dudley Co., Nashville, Tenn.  
Heating Systems & Supply Co., Chicago, Ill.  
Henry Furnace & Fdy. Co., Cleveland, Ohio  
Hero Furnace Co., Sycamore, Ill.  
Hess-Snyder Co., Massillon, Ohio  
Homer Furnace Co., Coldwater, Mich.  
International Heater Co., Utica, N. Y.  
Kruse Co., Indianapolis, Ind.  
Lamneck Co., W. E., Columbus, Ohio  
Langenberg Mfg. Co., St. Louis, Mo.  
Lennox Furnace Co., Marshalltown, Ia.: Syracuse, N. Y.  
Liberty Foundry Co., St. Louis, Mo.  
Marshalltown Heater Co., Marshalltown, Iowa  
May-Fieberger Furnace Co., Newark, Ohio  
Meyer Furnace Co., The, Peoria, Ill.  
Monitor Furnace Co., Cincinnati, Ohio  
Mt. Vernon Furnace & Mfg. Co., Mt. Vernon, Ill.  
Mueller Furnace Co., S. J., Milwaukee, Wis.  
Oakland Foundry Co., Belleville, Ill.  
Peerless Foundry Co., Indianapolis, Ind.  
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- Rudy Furnace Co.,**  
Dowagiac, Mich.
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Ashland, Ohio
- Schill Bros. Co.,**  
Crestline, Ohio
- Schwab & Sons Co., R. J.,**  
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- Security Stove & Mfg. Co.,**  
Kansas City, Mo.
- Standard Foundry & Mfg. Co.,**  
DeKalb, Ill.
- Standard Furnace & Supply Co.,**  
Omaha, Neb.
- St. Clair Foundry Corporation,**  
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- Thatcher Co.,**  
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- Utica Heater Co.,**  
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Minneapolis, Minn.
- Western Steel Products Co.,**  
Duluth, Minn.
- Wise Furnace Co.,**  
Akron, Ohio
- Williamson Heater Co.,**  
Cincinnati, Ohio
- Garages—Metal.**  
Milwaukee Corrugating Co., Milwaukee, Wis.
- Glass—Wire.**  
David Lupton's Sons Co., Philadelphia, Pa.  
Williams Hardware Co., Streator, Ill.
- Grilles.**  
Hart & Cooley Co., New Britain, Conn.  
Independent Register & Mfg. Co., Cleveland, Ohio  
Tuttle & Bailey Mfg. Co., Chicago, Ill.
- Handies—Boiler.**  
Berger Bros. Co., Philadelphia, Pa.
- Hangers—Eaves Trough.**  
Berger Co., L. D., Philadelphia, Pa.  
Hepson & Co., W. C., Grand Rapids, Mich.  
Milwaukee Corrugating Co., Milwaukee, Wis.
- Heaters—Cabinet.**  
Fox Furnace Co., Elyria, Ohio  
Gray & Dudley Co., Nashville, Tenn.  
Mueller Furnace Co., L. J., Milwaukee, Wis.  
Peninsular Stove Co., Detroit, Mich.  
Waterman-Waterbury Co., Minneapolis, Minn.
- Heaters—School Room.**  
Floral City Heater Co., Monroe, Mich.  
Hero Furnace Co., Sycamore, Ill.  
Meyer Furnace Co., The, Peoria, Ill.  
Standard Furnace & Supply Co., Omaha, Neb.  
Waterman-Waterbury Co., Minneapolis, Minn.
- Hooks—Conductor.**  
Berger Co., L. D., Philadelphia, Pa.
- Humidifiers.**  
National Air Moistener Co., Minneapolis, Minn.
- Jobbers—Hardware.**  
Clark-Smith Hardware Co., Peoria, Ill.
- Kitchen Utensils.**  
Lalanc & Grosjean Mfg. Co., Chicago, Ill.
- Lath—Expanded Metal.**  
Milwaukee Corrugating Co., Milwaukee, Wis.
- Machines—Crimping.**  
Bertsch & Co., Cambridge City, Ind.
- Machinery—Culvert.**  
Bertsch & Co., Cambridge City, Ind.
- Machines—Tinmiths.**  
Bertsch & Co., Cambridge City, Ind.  
Chicago Elbow Machine Co., Oak Park, Ill.
- Dreis & Krump Mfg. Co.,**  
Chicago, Ill.
- Great Lakes Supply Co.,**  
South Chicago, Ill.
- Marshalltown Mfg. Co.,**  
Marshalltown, Iowa
- Osborn Co., The J. M. & L. A.,**  
Cleveland, Ohio
- Peck, Stow & Wilcox Co.,**  
Southington, Conn.
- Ryerson & Son, Inc., Joseph T.,**  
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- Unishear Co., The, New York, N. Y.**
- Whitney Mfg. Co., W. A.,**  
Rockford, Ill.
- Whitney Metal Tool Co.,**  
Rockford, Ill.
- Metals—Perforated.**  
Harrington & King Perforating Co., Chicago, Ill.
- Miters.**  
Friedley-Voshardt Co., Chicago, Ill.  
Milwaukee Corrugating Co., Milwaukee, Wis.
- Miters—Eaves Trough.**  
Braden Mfg. Co., Terre Haute, Ind.  
David Lupton's Sons Co., Philadelphia, Pa.  
Milwaukee Corrugating Co., Milwaukee, Wis.
- Nails—Hardened Masonry.**  
Parker-Kalon Co., New York, N. Y.
- Nails—Siding.**  
Hussey & Co., C. G., Pittsburgh, Pa.
- Nails—Wire.**  
American Steel & Wire Co., Chicago, Ill.
- Oil Burners.**  
Security Stove & Mfg. Co., Kansas City, Mo.
- Ornaments—Sheet Metal.**  
Friedley-Voshardt Co., Chicago, Ill.
- Serock Bros. Mfg. Co.,**  
St. Louis, Mo.
- Milwaukee Corrugating Co.,**  
Milwaukee, Wis.
- Paint.**  
Connors Paint Mfg. Co., Wm., Troy, N. Y.  
Pecora Paint Co., Philadelphia, Pa.
- Patterns—Furnace & Stove.**  
Cleveland Castings Pattern Co., Cleveland, Ohio  
Quincy Pattern Co., Quincy, Ill.  
Vedder Pattern Works, Troy, N. Y.
- Pipe and Fittings—Furnace.**  
Chicago Furnace Supply Co., Chicago, Ill.  
Excelsior Steel Furnace Co., Chicago, Ill.  
Henry Furnace & Fdy. Co., Cleveland, Ohio  
Lamneck Co., W. E., Columbus, Ohio  
Meyer & Bro. Co., F. Peoria, Ill.  
Milwaukee Corrugating Co., Milwaukee, Wis.  
Mueller Furnace Co., L. J., Milwaukee, Wis.  
Osborn Co., The J. M. & L. A., Cleveland, Ohio  
Robinson Furnace Co., Chicago, Ill.  
Standard Furnace & Supply Co., Omaha, Neb.
- Pipe and Fittings—Stove.**  
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Dieckmann Co., Ferdinand, Cincinnati, Ohio  
Friedley-Voshardt Co., Chicago, Ill.  
Hussey & Co., C. G., Pittsburgh, Pa.  
Lupton's Sons Co., David, Philadelphia, Pa.  
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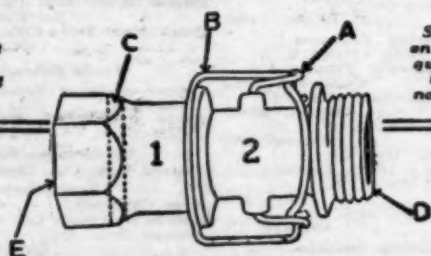
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Chicago, Ill.  
Merchant & Evans Co.,  
Philadelphia, Pa.

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Taylor Co., N. & G.,  
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New Jersey Zinc Sales Co., The,  
New York, N. Y.

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Hart & Cooley Co.,  
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St. Louis Technical Institute,  
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Cleveland, Ohio

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Northern Institute,  
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Harrington & King Perforating  
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New Jersey Zinc Sales Co., The,  
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Sall Mountain Co.,  
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David Lupton's Sons Co.,  
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Milwaukee, Wis.

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Heating Systems & Supply Co.,  
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National Enameling and Stamping  
Co.,  
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Taylor Co., N. & G.,  
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Whitney Mfg. Co., W. A.,  
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**Whitney Metal Tool Co.,**  
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Berns Co., Otto,  
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**Burgess Soldering Furnace Co.,**  
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Clayton & Lambert Mfg. Co.,  
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**Diener Mfg. Co.,**  
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Double Blast Mfg. Co.,  
North Chicago, Ill.

**Quick Meal Stove Co.,**  
St. Louis, Mo.

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sociation,  
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**Royal Ventilator Co.,**  
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## WANTS AND SALES

For paid yearly subscribers, **AMERICAN ARTISAN AND HARDWARE RECORD** will insert under this head advertisements of not more than fifty words **WITHOUT CHARGE**. Employers wishing to secure employees, parties desiring to purchase or sell business, secure partners, or to exchange, etc., will find that these pages offer excellent opportunities to satisfy their wants. Clerks and tinsmiths looking for situations will find it to their advantage to use these columns. Those who respond to these announcements please mention that they "READ THE ADVERTISEMENT IN AMERICAN ARTISAN AND HARDWARE RECORD."

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**LIGHTNING RODS**—Dealers who are selling Lightning Protection will make money by writing us for our latest Factory to Dealer Prices. We employ no salesmen and save you all overhead charges. Our Pure Copper Cable is endorsed by the Mutual Insurance Companies and hundreds of reliable dealers. Write today for samples and prices. L. K. DIDDIE CO., Marshfield, Wis.

For Sale—Plumbing, furnace and sheet metal business. Central Western Illinois city of 3,500; growing fast; on Ocean to Ocean hwy.; water works and sewer just completed; big demand for plumbing and goods; 35 warm air furnaces will be sold, have 15 assured. Complete outfit of plumbers' tools and tinners' tools, nothing to be bought; business established. Licensed master plumber and furnace expert; will stay and draw wages only when at work; well acquainted with trade; owns home. Brick room located on hardwood 20x70, cement floor in work room, show room very light; rent, phone, light and heat \$18.00 per month. Will invoice about \$1,500; \$1,000 cash, balance six months, secured. Freight reasonable, from St. Louis by river 12 hours, Chicago 48 hours; not necessary to carry large stock. People prosperous; six churches, splendid schools, factories, beautiful city, house rents reasonable. Must go west, real estate investments need attention. Address B-59, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 16-3t

For Sale—Combination plumbing and tinshop in one of the prettiest towns of 3,500 population in Colorado. On paved highway to Denver, at the foot of the mountains, on the main highway to Denver mountain parks. Ideal climate summer and winter. Reason for selling this dandy busy shop, I am going into the manufacturing business. Last year was considered a dull year, but this shop averaged better than \$1,000 per month. Plenty of work for plumbers and tinners the year around. Machines and tools practically new. A dandy equipment, including 1925 Ford ton truck. Shop is on main business street. Fine location and good opportunity for a hardware store if desired. Only one other shop in town. Stock, tools and machines will invoice about \$2,750. Better act quick if you want a dandy, clean, up-to-date paying business in a nice clean town with paved streets. New \$200,000 high school. Address B-67, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 16-3t

For Sale or Lease—Best equipped shop in Casper, Wyoming. Other business requires my attention. Deal must be closed by May 1. For particulars write Box 150, Casper, Wyoming. 17-3t

For Sale—A well equipped tinshop, located in a thriving little city near several lakes in southern Wisconsin. A snap for a good tinner who is a hustler. Address B-70, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 17-3t

## BUSINESS CHANCES

For Sale—A sheet metal shop and furnace works located in Wisconsin. Long established and good location. Selling and installing about 200 furnaces per year. Ill health reason for selling. Will consider property in exchange located in Arkansas or southern Missouri. Address B-75, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 17-6t

For Sale—Old established sheet metal and stove repair business, including 8-ft. cornice brake, roofing tools, squaring shears, etc., used Ford truck, also ladders. Doing good business. Reason for selling, must settle an estate. Address B-73, care of AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 17-3t

For Sale—Must sell at once; well established sheet metal business and stock, cooperating with large hardware company in adjoining building. Rent on 2,000 feet floor space, tools and fixtures, \$28.00. Good reason for selling. Will show profit to interested party. Thatcher Furnace Agency. Address Darling & Saxton, Wau-pun, Wisconsin. 17-3t

For Sale—Sheet metal shop in northwestern Iowa. Full set tools. Good established business in town of 1500. No competition. Fine school facilities. Good territory. Excellent opportunity for a tinner and plumber combined. Address B-77, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 18-3t

For Sale—On account of other interests taking all my time, will sell well established going sheet metal and furnace business in prosperous Wisconsin city of 10,000 population. Liberal terms and full co-operation. Address B-65, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 16-3t

Wanted—To buy a good clean hardware store doing an active business in a town of 1,500 or larger. State amount of business done last year and the price you expect in answer to this ad. Address B-69, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 17-3t

## HELP WANTED

WANTED—3 first class tinners and skylight makers. Plenty of work all the year around. Job to sober and competent workman at good pay. Also can now use a good working foreman who can estimate and take charge of business when I am away. Delightful climate, never warmer than 86, cool breezes from the bay or gulf most of the time. State age. Wire or address, Box 1936, St. Petersburg, Florida. 18-3t

Wanted—Capable mechanic familiar with blow-piping and general light and light heavy sheet metal work for factories. Must be good layout man and familiar with power equipment in addition to ordinary hand tools. Young man capable of developing into shop foreman preferred. Open shop condition. Good wages and year around job. Address B-79, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Ill. 18-3t

Wanted—A first class sheet metal worker; experienced in cafeteria and kitchen equipment. Steady job for competent man. Address Omaha Fixture and Supply Co., 1101 Douglas St., Omaha, Nebraska. 16-3t

Wanted—At once, tinner that understands furnace work and all kinds of job work. Steady job the year around for right man. Wages \$40.00 per week. Address J. H. Barnett, Dodge City, Kansas. 18-3t

Wanted—An all around sheet metal worker. Steady work for good man. Address Bartholomew & Co., Michigan City, Ind. 19-3t

## SITUATION WANTED

Situation Wanted—Young man with 16 years' experience in plumbing, heating and tinning. Would like steady job the year around with some reliable firm. No job too big and none too small. Have Iowa and Illinois plumbers license. Can come by June 15th or sooner if necessary. Please state particulars when answering as to wages, hours if steady work. Get in touch with me at once if you want a reliable man. Can read blue prints and run a shop. Address B-60, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 16-3t

Situation Wanted—By tinner and furnace man who can do plumbing. Twenty years' experience; cut own patterns. Have had experience with hardware. Wages and location not considered; I am married and wish steady position. Can come at once. Would like to hear from someone looking for a good man. Address J. R. Alexander, 313 Bridge St., Crookston, Minnesota. 16-3t

Situation Wanted—By a good all around plumber, tinner and steamfitter, also good on repair work. Am middle age, married and want steady position the year around. Am employed at present but want to make a change. Can come on short notice. Please state wages. Address B-71, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 17-3t

Situation Wanted—By sheet metal worker and furnace man, stove repairing. Have had four years' experience in hardware store and selling farm machinery. Prefer western Montana, northern Idaho or Washington. Married. 44 years of age. Can start after the first week in May. Address Geo. W. Burton, P. O. Box 127, Anaconda, Montana. 16-3t

Situation Wanted—By first class tinner and furnace man, making a specialty of warm air heating. Can lay out blue prints, estimate and draft patterns. 12 years' experience. Age 33. Middle West preferred. State full particulars. Address B-80, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Ill. 18-3t

Situation Wanted—In central western states by competent plumber, fitter and furnace man. Middle age; have family. Have wide experience in the trades. Spent several years in some of the large eastern shops. Am strictly temperate. Can handle the business in capacity of foreman on a paying basis. Address Box 348, Saco, Montana. 17-3t

Situation Wanted—By a first-class sheet metal worker. Am able to lay out all kinds of work. Am sober, steady and reliable. Kindly state wages and hours you work in letter. Address B-74, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 17-3t

Situation Wanted—By first-class sheet metal worker and plumber. Furnace installer and radiator repairing. All general repairing. Would like position where there is plenty of work. Address B-68, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 17-3t

Wanted—Steady position as plumber; also handy on steam or hot water heating. Also good gas engine mechanic. Married. Can furnish best of references. Address B-76, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 18-3t

Situation Wanted—By a practical all-around sheet metal worker with 25 years' experience. Can lay out own work and erect same. State wages. Position must be steady. Address B-78, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 18-3t



## TINNERS' TOOLS

Wanted—1 pair of No. 742½ wide gauge roofing seamers to follow 1½ and 1¼ roofing tongs, 1 roofing cleater and nailer No. 997 for wide gauge; 1 No. 542 large turner; 1 No. 540 small turner with 1½ face; 1 No. 550 elbow edging machine with 1½ face; 1 No. 986 skate ripper, also some stakes as follows—No. 949 double seaming with 4 heads; No. 958 teakettle stake with 4 heads. All tools and machines must be in perfect working condition. State what you have, its condition and price. Address Box 216, Saybrook, Illinois. 18-3t.

For Sale—Three turning machines, different sizes; burring machine, bench shears, 30-in. forming rolls, beading machines, grooving machine, two wiring machines, setting down machine, machine for seaming bottoms, several sizes, one bar folder, one pipe folding machine, gutter header and other small tools. First check for \$60 gets them at once. These machines have standards. Address B-64, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 17-3t

For Sale—2 forming machines, 2 sheet iron folders, 1 bar folding machine, 1 wiring machine, turning and buring machine, 1 30-inch squaring machine, 1 header, 1 groover, double seamers, stakes, tongs, bench shears, and small tools, set of plumbing tools, 1 new National cash register, cost \$275, will sell cheap, used 18 months. Address Box 251, Cowden, Ill. 19-3t

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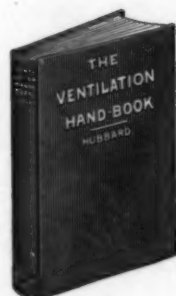
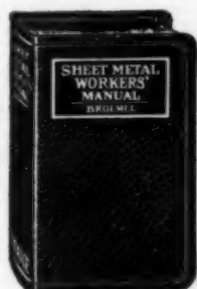
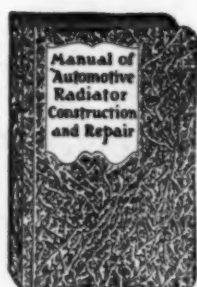
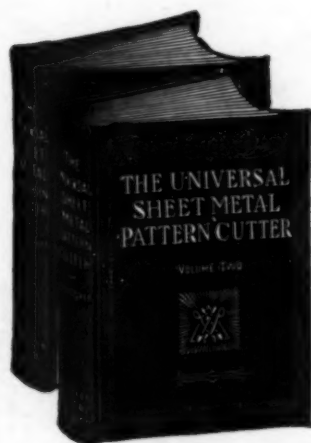
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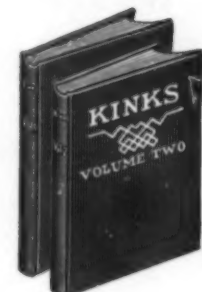
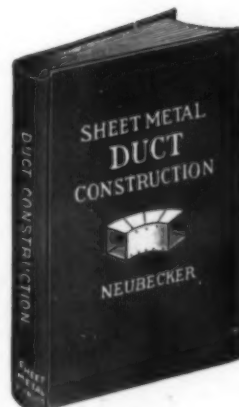
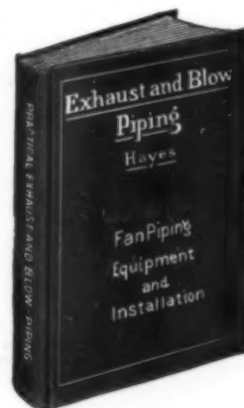
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